VPDES PERMIT PROGRAM FACT SHEET

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a **MAJOR INDUSTRIAL** permit.

1. **PERMIT NO.**: VA0004162

EXPIRATION DATE: November 15, 2015

2. **FACILITY NAME AND LOCAL MAILING ADDRESS**

International Paper - Franklin Mill
34040 Union Camp Drive
Franklin, VA 23851

FACILITY LOCATION ADDRESS (IF DIFFERENT)

same

CONTACT AT FACILITY:
NAME: Sheryl S. Raulston
TITLE: EHS Manager
PHONE: (757) 569-4558

CONTACT AT LOCATION ADDRESS
NAME: Raye Moore
TITLE:
PHONE: (757) 569-4793

3. **OWNER CONTACT**: (TO RECEIVE PERMIT)
NAME: Sheryl S. Raulston
TITLE: EHS Manager
COMPANY NAME: (IF DIFFERENT)
ADDRESS: 34040 Union Camp Drive
Franklin, VA 23851
PHONE: (757) 569-4558
EMAIL:

CONSULTANT CONTACT:
NAME:
FIRM NAME:
ADDRESS:

PHONE: ( )
EMAIL:

4. **PERMIT DRAFTED BY**: DEQ, Water Permits, Regional Office

Permit Writer(s): Sauer
Reviewed By:

Date(s): 2-2012
Date(s):

5. **PERMIT ACTION:**

( ) Issuance ( ) Reissuance ( ) Revoke & Reissue (X) Owner Modification
( ) Board Modification ( ) Change of Ownership/Name [Effective Date:]

6. **SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS**:

Attachment 1	Site Inspection Report/Memorandum
Attachment 2	Discharge Location/Topographic Map
Attachment 3	Schematic/Plans & Specs/Site Map/Water Balance
Attachment 4	TABLE I - Discharge/Outfall Description
Attachment 5	TABLE II - Effluent Monitoring/Limitations
Attachment 6	Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding
Attachment 7	Special Conditions Rationale
Attachment 8	Toxics Monitoring/Toxics Reduction/WET Limit Rationale
Attachment 9	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling/303(d) Listed Segments
Attachment 10	TABLE III(a) and TABLE III(b) - Change Sheets
Attachment 11	NPDES Industrial Permit Rating Worksheet and EPA Permit Checklist
Attachment 12	Chronology Sheet
Attachment 13	Public Participation/Pertinent Correspondence

APPLICATION COMPLETE: 2/15/12, upon VDH comments

7. **PERMIT CHARACTERIZATION:** (Check as many as appropriate)

(X) Existing Discharge
( ) Proposed Discharge
( ) Municipal
SIC Code(s)
(X) Industrial
SIC Code(s)2611
( ) POTW
( ) PVOTW
(X) Private
( ) Federal
( ) State
( ) Publicly-Owned Industrial

(X) Effluent Limited
(X) Water Quality Limited
( ) WET Limit
( ) Interim Limits in Permit
( ) Interim Limits in Other Document
( ) Compliance Schedule Required
( ) Site Specific WQ Criteria
( ) Variance to WQ Standards
( ) Water Effects Ratio
(X) Discharge to 303(d) Listed Segment
(X) Toxics Management Program Required
( ) Toxics Reduction Evaluation
(X) Storm Water Management Plan
( ) Pretreatment Program Required
(X) Possible Interstate Effect
( ) CBP Significant Dischargers List

8. Outfall No(s).

Receiving Stream

001 (and internal Outfall 103)

Blackwater River
River Mile: 5ABLW000.62
Basin: Chowan and Dismal Swamp
Subbasin: Chowan River
Section: 1
Class: II
Special Standard(s): NEW-21
7-Day/10-Year Low Flow: 1.36 MGD (Nov-Mar)
1-Day/10-Year Low Flow: 0.22 MGD (Nov-Mar)
30-Day/5-Year Low Flow: 29.3 MGD (Nov-Mar)
Harmonic Mean Flow: 702.2 MGD (Nov-Mar)
Tidal: YES

002

Blackwater River
River Mile: 5ABLW0013.73
Basin: Chowan and Dismal Swamp
Subbasin: Chowan River
Section: 1
Class: II
Special Standard: NEW-21
7-Day/10-Year Low Flow: 1.36 MGD (Nov-Mar)
1-Day/10-Year Low Flow: 0.22 MGD (Nov-Mar)
30-Day/5-Year Low Flow: 29.3 MGD (Nov-Mar)
Harmonic Mean Flow: 702.2 MGD (Nov-Mar)
Tidal: YES

006, 007, 010, 012, 013, 014

Washole Creek
River Mile: 5AKNG000.04
Basin: Chowan and Dismal Swamp
Subbasin: Chowan River
Section: 2
Class: VII
Special Standard: NEW-21
7-Day/10-Year Low Flow: 0 MGD
1-Day/10-Year Low Flow: N/A MGD
30-Day/5-Year Low Flow: N/A MGD
Harmonic Mean Flow: N/A MGD

008, 009, 011	Tidal:	NO
	Kingsale Swamp	
	River Mile: 5AKNG004.66	
	Basin: Chowan and Dismal Swamp	
	Subbasin: Chowan River	
	Section: 2	
	Class: VII	
	Special Standard: NEW-21	
	7-Day/10-Year Low Flow:	0 MGD
	1-Day/10-Year Low Flow:	N/A MGD
	30-Day/5-Year Low Flow:	N/A MGD
	Harmonic Mean Flow:	N/A MGD
	Tidal:	NO
015		
	Beaverdam Swamp	
	River Mile:	
	Basin: Chowan and Dismal Swamp	
	Subbasin: Chowan River	
	Section: 2	
	Class: VII	
	Special Standard: NEW-21	
	7-Day/10-Year Low Flow:	0 MGD
	1-Day/10-Year Low Flow:	N/A MGD
	30-Day/5-Year Low Flow:	N/A MGD
	Harmonic Mean Flow:	N/A MGD
	Tidal:	NO

9. **FACILITY DESCRIPTION:** Describe the type facility from which the discharges originate.

Existing and proposed industrial discharge resulting from the past manufacture of bleached printing paper and paperboard. The facility ceased paper making operations in April 2010, but discharges from the facility remained during the closed and clean-up phase of the plant. Future operations include operation as a pulp mill and will once again result in process wastewater discharges from ongoing operations at the facility.

THE MODIFICATION CONSISTS OF addressing new pulp mill operations as a result of repurposing the mill. One internal outfall (103, the F bleach line), which was removed from the permit at reissuance in accord with ceasing operations at the plant, will be included in the permit with associated monitoring and limitations and all associated special conditions for the pulp mill operation will be included in the modified permit. Some effluent limitations were recalculated based on the mill repurposing at outfall 001. An effluent characterization for outfall 001 will be required with the application for reissuance. An effluent characterization for outfall 009 will be required with the application for reissuance based on reported spills to the storm water outfall. See Attachment 10 for all changes as part of this modification.

10. **LICENSED OPERATOR REQUIREMENTS:** ( ) No (X) Yes Class: I

11. **RELIABILITY CLASS:** Industrial Facility - NA

12. **SITE INSPECTION DATE:** 1/25/11 **REPORT DATE:** 1/27/11

Performed By: Gantt

SEE ATTACHMENT 1

13. **DISCHARGE(S) LOCATION DESCRIPTION:** Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Outfall 001: Name of Topo: Riverdale Quadrant No.: 05C

Outfalls 002, 006, 007, 010, 012, 013, 014, 015: Name of Topo: Franklin Quadrant No.: 05B

Outfalls 008, 009, 011: Name of Topo: Holland Quadrant No.: 05A

SEE ATTACHMENT 2

14. **ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.**

SEE ATTACHMENT 3

15. **DISCHARGE DESCRIPTION:** Describe each discharge originating from this facility.

SEE ATTACHMENT 4

16. **COMBINED TOTAL FLOW:**

TOTAL: 126 MGD (for public notice)

PROCESS FLOW: 125 MGD (IND.)

NONPROCESS/RAINFALL DEPENDENT FLOW: 1 MGD (Est.)

DESIGN FLOW: _____ MGD (MUN.)

17. **STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS:** (Check all which are appropriate)

- X State Water Control Law
- X Clean Water Act
- X VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
- X EPA NPDES Regulation (Federal Register)
- X EPA Effluent Guidelines (40 CFR 133 or 400 - 471)
- X Water Quality Standards (9 VAC 25-260-5 et seq.)
- X Wasteload Allocation from a TMDL or River Basin Plan

18. **EFFLUENT LIMITATIONS/MONITORING:** Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5

19. **EFFLUENT LIMITATIONS/MONITORING RATIONALE**: Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit).
SEE ATTACHMENT 6

20. **SPECIAL CONDITIONS RATIONALE**: Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 7

21. **TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE**: Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

SEE ATTACHMENT 8 (no change from the reissuance of this permit)

22. **SLUDGE DISPOSAL PLAN:** Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

N/A

23. **MATERIAL STORED:** List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

To be included in the O&M Manual for the repurposed plant

24. **RECEIVING WATERS INFORMATION:** Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.). **Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied.** Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 9

25 **305(b)/303(d) Listed Segments:** Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

This facility discharges directly to the Blackwater River. The receiving stream segment has been listed as a Category 4C of the 305b /303d list for non attainment of dissolved oxygen. No TMDL is required for Dissolved Oxygen since a Natural Conditions Report was EPA approved 4/8/2010. The permit requires in-stream monitoring for dissolved oxygen and has discharge conditions based on the in-stream dissolved oxygen concentration. The permit contains a TMDL reopener clause which will allow these requirements to be modified, in compliance with section 303(d)(4) of the Act once a TMDL is approved.

This receiving stream segment has been listed in Category 5 of the 305(b)/303(d) list for non-attainment of mercury (fish tissue). A TMDL has not been prepared or approved for this stream segment. No limit for mercury is included in this permit as that pollutant is either absent from the effluent or contained in such low concentrations as to not cause or contribute to the non-attainment of the stream segment. The permit contains a TMDL reopener clause which will allow the permit to be modified, in compliance with section 303(d)(4) of the Act once a TMDL is approved.

Receiving waters conditions and impairments/TMDL's will be further evaluated at the reissuance of the permit. No external discharges or river conditions are affected as part of this modification.

SEE ATTACHMENT 9

26. **CHANGES TO PERMIT:** Use **TABLE III(a)** to record any changes from the previous permit and the rationale for those changes. Use **TABLE III(b)** to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 10

27. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET:**

TOTAL SCORE: 140 **SEE ATTACHMENT 11**

28. **DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT:** Document any comments received from DEQ planning.

The discharge is not addressed in any planning document but will be included when the plan is updated.

29. **PUBLIC PARTICIPATION:** Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and the Div. of Shellfish Sanitation and noted how resolved.

The VDH reviewed the application and waived their right to comment and/or object on the adequacy of the draft permit. Letter dated 2/13/12.

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA has no objections to the adequacy of the draft permit.

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

The draft permit was sent to North Carolina and no comments were received.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved.

Not Applicable.

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

PUBLIC NOTICE INFORMATION: Comment Period: Start Date March 9, 2012
End Date April 9, 2012

Persons may comment in writing or by e-mail to the DEQ on the proposed issuance/reissuance/modification of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Mark H. Sauer at: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462. Telephone: 757-518-2105 E-mail: mark.sauer@deq.virginia.gov

Following the comment period, the Board will make a determination regarding the proposed issuance/reissuance/modification. This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

30. **ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:**

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

March 8, 2011

Via Email
Ms. Sheryl Raulston
International Paper Co.
34040 Union Camp Drive
Franklin, VA 23851

Re: Inspection Report
International Paper Co. – Franklin Mill (VA0004162)

Dear Ms. Raulston:

Enclosed is a copy of the report prepared for the inspection conducted at your facility on January 25, 2011. No problems or deficiencies were noted during the inspection and you and your staff are to be commended for your efforts.

If you have any questions regarding this report, please feel free to contact me at the above address, telephone (757) 518-2114 or email clyde.gantt@deq.virginia.gov.

Sincerely,

Clyde K. Gantt
VPDES/VPA Permit Inspector

Enclosure

cc: DEQ/OWCP: Steve Stell
DEQ/TRO: File
USEPA Region III

Facility:	INTERNATIONAL PAPER CO.
County/city:	FRANKLIN

VPDES NO.	VA0004162

DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTEWATER FACILITY
INSPECTION REPORT
PART 1

Inspection date:	**January 25, 2011**	Date form completed:	**January 27, 2011**
Inspection by:	**Clyde Gantt**	Inspection agency:	**DEQ/TRO**
Time spent:	**15 Hours**	Announced Inspection:	[X] Yes [ ] No
Reviewed by: **Kenneth T. Raum / 02-11-11**		Photographs taken at site?	[X] Yes [ ] No
Present at inspection:	**Sheryl Raulston – EHS Mgr.; Raye Moore – Env. Spec., John Bunch – Env. Tech**		

FACILITY TYPE:	FACILITY CLASS:
( ) Municipal	(X) Major
(X) Industrial	( ) Minor
( ) Federal	( ) Small
( ) VPA/NDC	( ) High Priority ( ) Low Priority

TYPE OF INSPECTION:

Routine	X	Reinspection		Compliance/assistance/complaint	
Date of previous inspection:	**July 15, 2008**	Agency:	**DEQ/TRO**		

Last Full Month Average: Effluent 001 January 2010	BOD_5 (mg/l)	**9**	TSS (mg/l)	**9.7**	Flow (MGD)	**74**	NH_3 (mg/l)	**0.25**
	Other: COD – 160 mg/l, TP – 1.04 mg/l, TN – 2.41 mg/l							

Has there been any new construction?	YES		NO	X
If yes, were the plans and specifications approved?	YES		NO	
DEQ approval date:				

COPIES TO: (X) DEQ/TRO; (X) DEQ/OWCP; (X) OWNER; ( ) OPERATOR; (X) EPA-Region III; ( ) Other:

FACILITY: **International Paper Co. - Franklin** **VA0004162**

PLANT OPERATION AND MAINTENANCE															
1.	Class/number of licensed operators:	I	1	II		III		IV		Trainee					
2.	Hours per day plant manned?	24													
3.	Describe adequacy of staffing	GOOD		AVERAGE	X	POOR									
4.	Does the plant have an established program for training personnel									YES		NO	N/A		
5.	Describe the adequacy of training	GOOD		AVERAGE		POOR	N/A								
6.	Are preventative maintenance tasks scheduled									YES		NO	X		
7.	Describe the adequacy of maintenance	GOOD		AVERAGE	X	POOR									
8.	Does the plant experience any organic/hydraulic overloading?									YES		NO	X		
	If yes, identify cause/impact on plant														
9.	Any bypassing since last inspection?									YES		NO	X		
10.	Is the standby electrical generator operational?							YES		NO		NA	X		
11.	How often is the standby generator exercised?	N/A													
	Power transfer switch?	N/A		ALARM SYSTEM?		Not Tested									
12.	When was the cross connection last tested on the potable supply?														
13.	Is the STP alarm system operational?							YES	X	NO		NA			
14.	Is sludge disposed in accordance with an approved SMP							YES		NO		NA	X		
15.	Is septage received by the facility?									YES		NO	X		
	Is septage loading controlled?							YES		NO		NA			
	Are records maintained?							YES		NO		NA			

OVERALL APPEARANCE OF FACILITY	GOOD		AVERAGE	X	POOR	

COMMENTS:	**Operations at this facility have ceased. The treatment system is still in use for unused well water and stormwater. Contract staff check on operations and keep a hand written log of maintenance performed and operational activities.**

FACILITY: **International Paper Co. - Franklin** **VA0004162**

PLANT RECORDS

	WHICH OF THE FOLLOWING RECORDS DOES THE PLANT MAINTAIN?							
	Operational logs for each process unit	YES	X	NO		NA		
	Instrument maintenance and calibration	YES	X	NO		NA		
	Mechanical equipment maintenance	YES	X	NO		NA		
1.	Industrial waste contribution (municipal facilities)	YES		NO		NA	X	

	WHAT DOES THE OPERATIONAL LOG CONTAIN					
	Visual Observations		Flow Measurement	X	Laboratory Results	
2.	Process Adjustments	X	Control Calculations		Other?	

COMMENTS:

	WHAT DO THE MECHANICAL EQUIPMENT RECORDS CONTAIN?				NA	
	MFG. Instructions	X	As Built Plans/specs		Spare Parts Inventory	
3.	Lube Schedules	X	Other?		Equipment/parts Suppliers	

COMMENTS:

	WHAT DO INDUSTRIAL WASTE CONTRIBUTION RECORDS CONTAIN? (MUNICIPAL)		NA	X
	Waste Characteristics		Impact on Plant	
4.	Location and Discharge Types		Other?	

COMMENTS:

	WHICH OF THE FOLLOWING RECORDS ARE AT THE PLANT & AVAILABLE TO PERSONNEL?						NA	
	Equipment Maintenance Records	X	Industrial Contributor Records					
5.	Operational Log	X	Sampling/testing Records	X	Instrumentation Records			X

6.	Records not normally available to personnel at their location:	**Operations records kept at plant location.**				
7.	Were the records reviewed during the inspection	YES	X	NO		
8.	Are records adequate and the O&M manual current?	YES	X	NO		
9.	Are the records maintained for the required 3-year time period	YES	X	NO		

COMMENTS:

FACILITY: **International Paper Co. - Franklin** **VA0004162**

SAMPLING												
1.	Are sampling locations capable of providing representative samples?					YES	X	NO				
2.	Do sample types correspond to VPDES permit requirements?					YES	X	NO				
3.	Do sampling frequencies correspond to VPDES permit requirements?					YES	X	NO				
4.	Does plant maintain required records of sampling?					YES	X	NO				
5.	Are composite samples collected in proportion to flow?	YES		NO		NA	X					
6.	Are composite samples refrigerated during collection?	YES		NO		NA	X					
7.	Does the plant run operational control tests?	YES		NO	X	NA						
COMMENTS:												

TESTING												
	Who performs the testing?	Plant	X	Central Lab		Commercial Lab	X					
1.	Name: **Universal Labs**											
3.	Does plant appear to have sufficient equipment to perform required tests?					YES	X	NO				
4.	Does testing equipment appear to be clean and/or operable?					YES	X	NO				
COMMENTS: **Staff performs sampling and pH analysis. All other analysis performed by Universal Labs.**												

FOR INDUSTRIAL FACILITIES WITH TECHNOLOGY BASED LIMITS ONLY												
1.	Is the production process as described in permit application? If no, describe changes in comments section.	YES	*	NO		NA						
2.	Are products/production rates as described in the permit application? If no list differences in comments section.	YES		NO		NA						
3.	Has the Agency been notified of the changes and their impact on plant effluent? Date agency notified:	YES		NO		NA						
COMMENTS: **The permit was written for the operational mill. No production processes are currently operational.**												

	PROBLEMS IDENTIFIED AT LAST INSPECTION:	CORRECTED	NOT CORRECTED
	None		

SUMMARY

INSPECTION COMMENTS:

	NOTE: This facility has earned the Extraordinary Environmental Enterprise (E4) rating in the Virginia Environmental Excellence Program (VEEP).
1.	**The stormwater requirements were reviewed. The SP3 was up to date with proper signatory requirements. The SP3 Annual Comprehensive Site Evaluation was conducted 12/11/10. No problems were noted. The Monthly site inspection and BMP monitoring was conducted 12/21/10. The quarterly visual sampling is not required due to this being a non-operational facility as per Mark Sauer's email of 11/18/10.**
2.	**The required river monitoring is being conducted by Universal Labs. The last documented sample run was 1/15/11.**
3.	**The treatment system, leachate pond and outfall were inspected. No problems were noted.**
4.	**The mill processing area has minimal activity and is kept reasonably clean. Stormwater from this area is routed to the treatment system.**
5.	**Most actual stormwater discharge points were not viewed. However, no problems were noted in the drainage areas inspected.**

COMPLIANCE RECOMMENDATIONS FOR ACTION:

DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTEWATER FACILITY
INSPECTION REPORT
PART II

Unit Process Evaluation Summary Sheet*

UNIT PROCESS	APPLICABLE	COMMENTS
WASTEWATER PUMPING	X	
FLOW MEASUREMENT	X	
SCREENING	X	
GRIT REMOVAL		
FLOW EQUALIZATION		
PONDS/LAGOONS	X	
OIL/WATER SEPARATOR		
PRIMARY SEDIMENTATION	X	
ACTIVATED SLUDGE AERATION		
EFFLUENT/PLANT OUTFALL	X	

STANDARD COMMENTS:

1. UNIT NEEDS ATTENTION
2. ABNORMAL INFLUENT/EFFLUENT
3. EVIDENCE OF EQUIPMENT FAILURE
4. UNAPPROVED MODIFICATION OR TEMPORARY REPAIR
5. EVIDENCE OF PROCESS UPSET

***REFER TO INDIVIDUAL UNIT PROCESS EVALUATION FORMS**

FACILITY: **International Paper Co. - Franklin** **VA0004162**

UNIT PROCESS:	SCREENINGS

			YES	NO	NA
1.	Number of manual units	1			
2.	Number of mechanical units	1			
3.	Number manual units in operation	0			
4.	Number of mechanical units in operation	1			
	Bypass channel provided		X		
5.	Bypass channel in use			X	
6.	Area adequately ventilated		X		
7.	Alarm system for equipment failure and/or overloads		X		
8.	Proper flow distribution between units				X
9.	How often are units checked and cleaned	1/SHIFT			
10.	Cycle of operation	STAFF OPERATED			
11.	Volume of screenings removed	MINIMAL			

GENERAL CONDITION:	GOOD		FAIR	X	POOR	

COMMENTS:	**The little material caught in the bar screen is from stormwater. Level alarms sent to guard house. There is also a local hydrogen sulfide alarm.**

FACILITY: **International Paper Co. - Franklin** **VA0004162**

UNIT PROCESS:	**PUMP STATION**

			YES	NO	NA
1.	Name of station	**Main Mill / #2 Pump Station**			
2.	Number of pumps?	**4 / 2**			
3.	Size:	**Various**			
4.	Type:	**Variable Rate: 4 ; Fixed Rate: 2**			
5.	Automatic alternation provided?				
	FOLLOWING EQUIPMENT OPERABLE				
6.	All pumps		X		
7.	Ventilation				X
8.	Control equipment		X		
9.	Sump pump				X
10.	Seal water system		X		
	RELIABILITY CONSIDERATIONS				
11.	Classification	I ( ) II (X) III ( )			
12.	Alarm system operable		X		
	ALARM SYSTEM				
13.	Type:	Local ( ) Telemetric (X)			
14.	**Conditions monitored:**	High water level	X		
		High liquid level in dry well			X
		Main electric power	X		
		Auxiliary electric power			X
		Failure of pumps to start	X		
		Test function			X
		Other:			X
15.	Backup for alarm system operational?		?	?	?
16.	Alarm signal reported to (identify):	**GUARD HOUSE**			
	CONTINUOUS OPERABILITY PROVISIONS	Generator ( ) Portable Pump ( )			
24.	(1) Day Storage ( )	(2) Sources of Electricity (X) Other: ( )			
25.	Does the station have a bypass?			X	
29.	How often is the station checked?	**1/SHIFT**			

GENERAL CONDITION:	GOOD ( )	FAIR (X)	POOR ( )
COMMENTS:	**NO PROBLEMS NOTED.**		

FACILITY: **International Paper Co. - Franklin** **VA0004162**

UNIT PROCESS:	**SEDIMENTATION**

	PRIMARY	X	SECONDARY		TERTIARY		YES	NO	NA
1.	Number of units				2				
2.	Number units in operation				2				
3.	Proper flow distribution between units						2		
4.	Sludge collection system working properly?						*		
5.	Signs of short circuiting and/or overloads							X	
6.	Effluent weirs level						X		
7.	Effluent weirs clean						X		
8.	Scum collection system working properly								X
9.	Influent/effluent baffle system working properly						X		
10.	Chemical Used					Chemical Addition			X
11.	Effluent characteristics				CLEAR				

GENERAL CONDITION:	GOOD		FAIR	X	POOR	

COMMENTS:	**THE SLUDGE COLLECTION SYSTEM HAS BEEN TURNED OFF DUE TO EXTREMELY LOW INFLUENT SOLIDS. ADDITIONALLY THE SLUDGE PUMPS AND SLUDGE PRESS ARE NO LONGER IN OPERATION.**

FACILITY: **International Paper Co. - Franklin** **VA0004162**

UNIT PROCESS:	**ASB, C & D PONDS**

		YES	NO	NA
1.	Type of filters: Aerated [ ] Polishing [ ] Unaerated [X]			
2.	Number of cells: **1 EACH**			
3.	Number cells in operation: **1 EACH**			
4.	Operation of system: Series [X] Parallel [ ] Other: [ ]			
5.	Color: Light Brown [ ]; Gray [ ] Brown [ ] Green [X] Other: [ ]			
6.	*EVIDENCE OF THE FOLLOWING PROBLEMS:*			
	Vegetation in lagoon or dikes?	X		
	Rodents burrowing on dikes?		X	
	Sludge bars?	X		
	Excessive foam?		X	
	Floating material?		X	
7.	If aerated, are lagoon contents mixed adequately?			X
8.	If aerated, is aeration system operating properly?			X
9.	Odors: Septic [ ] Earthy [ ] None [X] Other: [ ]			
10.	Fencing intact?	X		
11.	Grass maintained properly?	X		
12.	Level control valves working properly?			X
13.	Effluent discharge elevation? Top [ ] Middle [ ] Bottom [X]			
14.	Freeboard: **>3 FT**			
15.	Appearance of effluent? GOOD [x] FAIR [ ] POOR [ ]			
	Are monitoring wells present?	X		
	Are wells adequately protected from runoff?	X		
16.	Are caps on and secured?	X		

GENERAL CONDITION:	GOOD [ ]	FAIR [X]	POOR [ ]

COMMENTS:	**THE AERATION UNITS ARE NOT IN OPERATION IN THE ASB (AERIATION STABILIZATION BASIN). THE ASB ALSO HAS FLOATING CURTAINS TO SLOW AND CHANNELIZE FLOW. THERE ARE FRAGMITES AND OTHER PLANTS ON THE INTERIOR BANKS OF ALL PONDS. THE STORMWATER PONDS ARE ESSENTIALLY VEGETATED WETLANDS.**

FACILITY: **International Paper Co. - Franklin** **VA0004162**

UNIT PROCESS:	**FLOW MEASUREMENT**

INFLUENT		INTERMEDIATE		EFFLUENT	X

			YES	NO	NA
1.	Type of measuring device	**PRESSURE DIFFERENTIAL**			
2.	Present reading?	**9.6 " Hg / 32.8 MGD**			
3.	Bypass channel			X	
4.	Bypass channel metered?				X
	Return flow discharged upstream of the meter?				X
5.	Identify:				
6.	Device operating properly?		X		
7.	Date of last calibration?	**1/24/11**			
	EVIDENCE OF THE FOLLOWING PROBLEMS				
	Obstruction?			X	
8.	Grease?			X	

GENERAL CONDITION:	GOOD		FAIR	X	POOR	

COMMENTS:	

FACILITY: **International Paper Co. - Franklin** **VA0004162**

UNIT PROCESS:	**EFFLUENT/PLANT OUTFALL**

									YES	NO	NA
1.	Type of outfall		Shore Based			Submerged	X				
	TYPE IF SHORE BASED:										
2.	Wingwall		Headwall		Rip Rap		Pipe	X			
3.	Flapper valve present?										X
4.	Erosion of bank area?									X	
5.	Effluent plume visible?										X
	Condition of outfall and the supporting structure?										
6.	GOOD		FAIR	X	POOR						
	FINAL EFFLUENT, EVIDENCE OF FOLLOWING PROBLEMS?										
	Oil sheen?									X	
	Grease?									X	
	Sludge bar?									X	
	Turbid effluent?									X	
	Visible foam?									X	
7.	Unusual color?									X	

GENERAL CONDITION:	GOOD		FAIR	X	POOR	

COMMENTS:	**The discharge flows through a screening structure, through an "L" shaped pipe to discharge underwater. The discharge is to a short canal prior to the Blackwater River.**

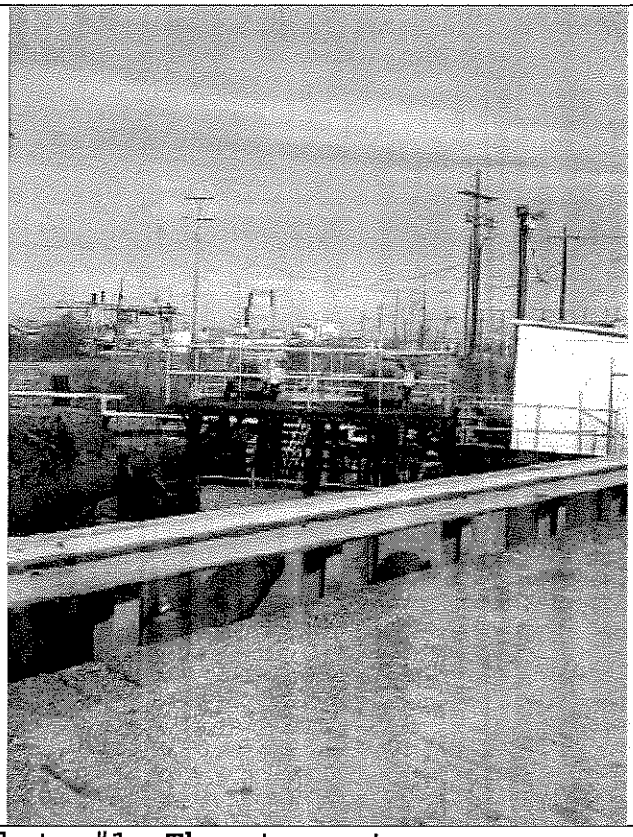


Photo #1. The stormwater pump station from bridge over Washoe Creek. Mill in the background

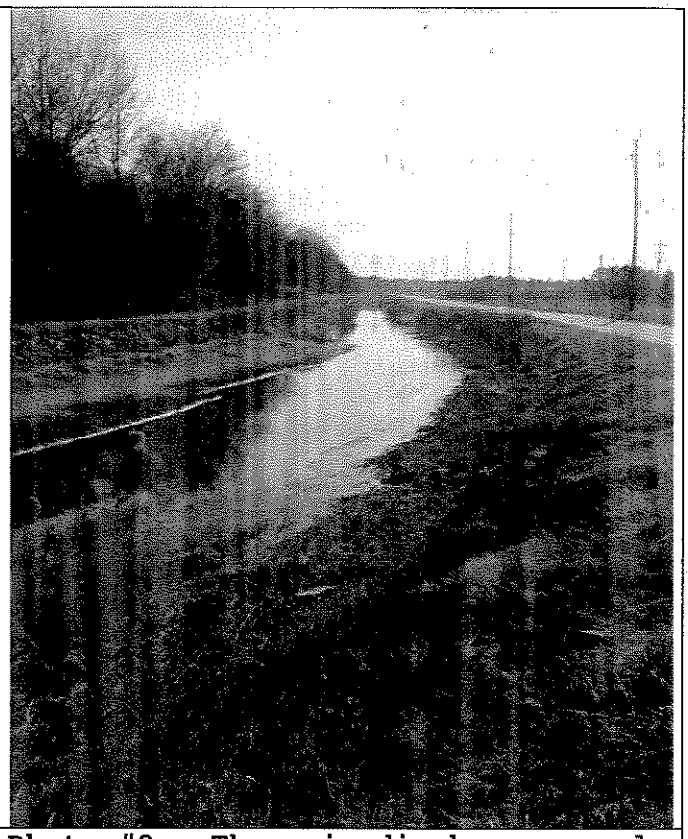


Photo #2. The main discharge canal between the clarifiers and the Aerated Basin.

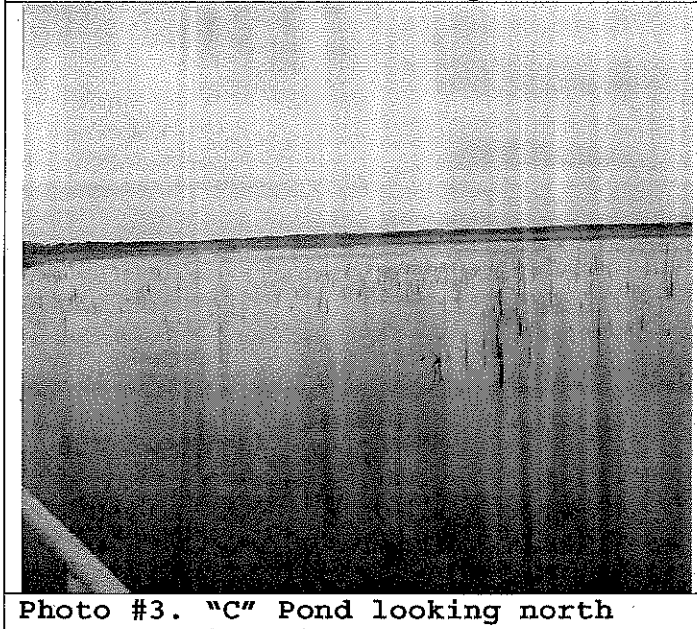


Photo #3. "C" Pond looking north from the discharge structure.

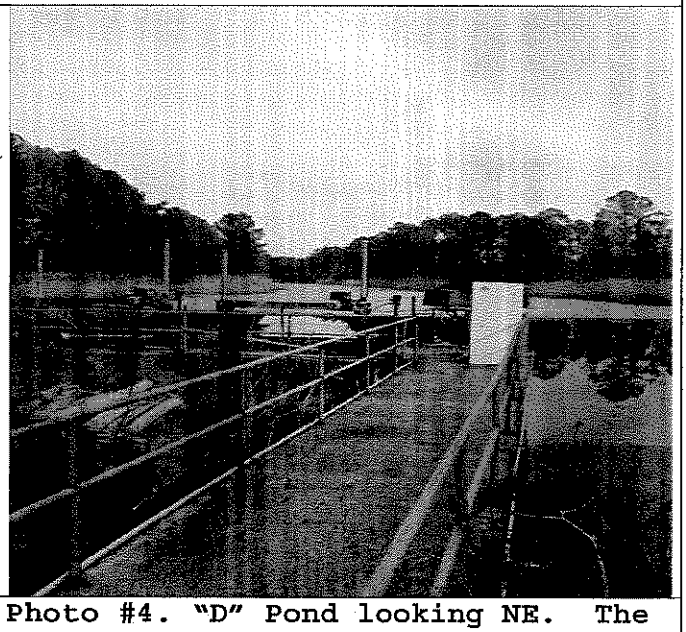
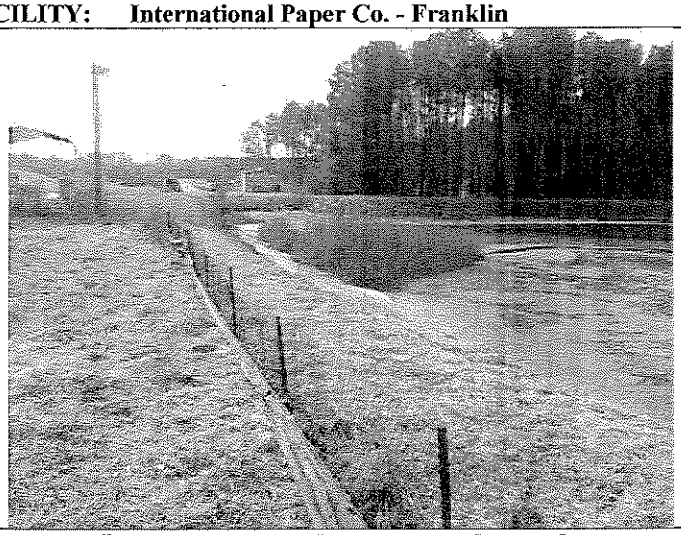


Photo #4. "D" Pond looking NE. The gated discharge structure is in the foreground. The pond is covered with duckweed behind the floating boom. The Blackwater River is behind the photographer.

	
Photo#5. The leachate pond. The building at center rear is the pump house. The landfill is to the left.	

68 Location VA0004162 Date 1/25/11

Project / Client Int'l Paper

9:15-1:40

Stormwater - John Bunch - Env. Tech
- Quarterly Visual waived by HHS 11/18/10.
- SP³ Comprehensive 12/11/10
- BMP Monitoring - 12/21/10
- River Monitoring - Universal Labs
  Lost 1/15/11
- Sample 001 - @ 12:20 Grab
  INUT pH ≤ 2.0
  TN, NWE
  Sampled by Ray Moore
  Photos (5) by Ray Moore
  ① Main Canal: Clarifiers → Aeration
  ② "D" Pond looking upstream with effluent structure. River behind photographer. Duck weed on Canal
  ③ "C Pond" looking N from effluent structure.
  ④ Stormwater PS with mill @ background Washoe Ck @ front
  ⑤ Leachate pond

Clyde K. Gantt

FACILITY: Rappahannock VA00

	PLANT OPERATION AND MAINTENANCE											
1.	Class/number of licensed operators:	I	/	II		III		IV		Trainee		
2.	Hours per day plant manned?	24 Hrs/D										
3.	Describe adequacy of staffing	GOOD		AVERAGE		POOR						
4.	Does the plant have an established program for training personnel							YES	✓	NO		
5.	Describe the adequacy of training	GOOD		AVERAGE	✓	POOR						
6.	Are preventative maintenance tasks scheduled Not since shut down							YES		NO	✓	
7.	Describe the adequacy of maintenance	GOOD		AVERAGE	✓	POOR						
8.	Does the plant experience any organic/hydraulic overloading?							YES		NO		
	If yes, identify cause/impact on plant											
9.	Any bypassing since last inspection?							YES		NO		
10.	Is the standby electrical generator operational?			YES				NO		NA	✓	
11.	How often is the standby generator exercised?											
	Power transfer switch?			ALARM SYSTEM?								
12.	When was the cross connection last tested on the potable supply?											
13.	Is the STP alarm system operational?			YES				NO		NA		
14.	Is sludge disposed in accordance with an approved SMP			YES				NO		NA		
15.	Is septage received by the facility?							YES		NO	✓	
	Is septage loading controlled?			YES				NO		NA		
	Are records maintained?			YES				NO		NA		

OVERALL APPEARANCE OF FACILITY	GOOD		AVERAGE		POOR	

COMMENTS:	

FACILITY: VA00

PLANT RECORDS

	WHICH OF THE FOLLOWING RECORDS DOES THE PLANT MAINTAIN?							
	Operational logs for each process unit Hand written log	YES	✓	NO		NA		
	Instrument maintenance and calibration	YES		NO		NA	✓	
	Mechanical equipment maintenance	YES	✓	NO		NA		
1.	Industrial waste contribution (municipal facilities)	YES		NO		NA	✓	

	WHAT DOES THE OPERATIONAL LOG CONTAIN							
	Visual Observations		Flow Measurement		Laboratory Results			
2.	Process Adjustments		Control Calculations		Other?			

COMMENTS:

	WHAT DO THE MECHANICAL EQUIPMENT RECORDS CONTAIN?						NA	
	MFG. Instructions		As Built Plans/specs		Spare Parts Inventory			
3.	Lube Schedules		Other?		Equipment/parts Suppliers			

COMMENTS:

	WHAT DO INDUSTRIAL WASTE CONTRIBUTION RECORDS CONTAIN? (MUNICIPAL)						NA	
	Waste Characteristics				Impact on Plant			
4.	Location and Discharge Types				Other?			

COMMENTS:

	WHICH OF THE FOLLOWING RECORDS ARE AT THE PLANT & AVAILABLE TO PERSONNEL?						NA	
	Equipment Maintenance Records				Industrial Contributor Records			
5.	Operational Log		Sampling/testing Records		Instrumentation Records			

6.	Records not normally available to personnel at their location:				
7.	Were the records reviewed during the inspection	YES		NO	
8.	Are records adequate and the O&M manual current?	YES		NO	
9.	Are the records maintained for the required 3-year time period	YES		NO	

COMMENTS:

UNIT PROCESS:	FLOW MEASUREMENT

INFLUENT [ ] INTERMEDIATE [ ] EFFLUENT [✓]

			YES	NO	NA
1.	Type of measuring device	Pressure Differential			
2.	Present reading?	9.6 "Hg			
3.	Bypass channel			✓	
4.	Bypass channel metered?				✓
	Return flow discharged upstream of the meter?		✓		
5.	Identify:	Stormwater			
6.	Device operating properly?		✓		
7.	Date of last calibration?	1/24/11			
	EVIDENCE OF THE FOLLOWING PROBLEMS				
	Obstruction?				
8.	Grease? 9.6 "/Hg				

GENERAL CONDITION:	GOOD	✓	FAIR		POOR	

COMMENTS:	

INFLUENT [ ] INTERMEDIATE [ ] EFFLUENT [ ]

			YES	NO	NA
1.	Type of measuring device				
2.	Present reading?				
3.	Bypass channel				
4.	Bypass channel metered?				
	Return flow discharged upstream of the meter?				
5.	Identify:				
6.	Device operating properly?				
7.	Date of last calibration?				
	EVIDENCE OF THE FOLLOWING PROBLEMS:				
	Obstruction?				
8.	Grease?				

GENERAL CONDITION:	GOOD		FAIR		POOR	

COMMENTS:	

UNIT PROCESS:	SCREENINGS/COMMINUTION

			YES	NO	NA
1.	Number of manual units	1			
2.	Number of mechanical units	✓			
3.	Number manual units in operation	0			
4.	Number of mechanical units in operation	1			
	Bypass channel provided		✓		
5.	Bypass channel in use			✓	
6.	Area adequately ventilated		✓		
7.	Alarm system for equipment failure and/or overloads		✓		
8.	Proper flow distribution between units				✓
9.	How often are units checked and cleaned				
10.	Cycle of operation				
11.	Volume of screenings removed				

GENERAL CONDITION:	GOOD		FAIR		POOR	

COMMENTS:	local H_2S alarm

UNIT PROCESS:	PUMP STATION

			YES	NO	NA
1.	Name of station	Main PS II, #2 Pump Sta (A&B → C Pond)			
2.	Number of pumps?	6 2 Pump			
3.	Size:				
4.	Type:	Variable X 4 Fixed X 2			
5.	Rated capacity:				
6.	Automatic alternation provided?				✓
FOLLOWING EQUIPMENT OPERABLE					
13.	All pumps		✓		
14.	Ventilation				✓
15.	Control equipment		✓		
16.	Sump pump				✓
17.	Seal water system		✓		
RELIABILITY CONSIDERATIONS					
18.	Classification	I ___ II ? III ___			
19.	Alarm system operable				
ALARM SYSTEM					
20.	Type:	Local ___ Telemetric ___			
21.	**Conditions monitored:**	High water level & Extra High	✓		
		High liquid level in dry well			✓
		Main electric power	✓		
		Auxiliary electric power			✓
		Failure of pumps to start	✓		
		Test function			
		Other:		✓	
22.	Backup for alarm system operational?	2 Sources electricity			
23.	Alarm signal reported to (identify):	Guard Shack			

Storm - Process area
excess well water

FACILITY: VA00

UNIT PROCESS:	Clarifier / SEDIMENTATION

	PRIMARY		SECONDARY		TERTIARY			YES	NO	NA
1.	Number of units				2					
2.	Number units in operation				2					
3.	Proper flow distribution between units							✓		
4.	Sludge collection system working properly?									✓
5.	Signs of short circuiting and/or overloads							✓		
6.	Effluent weirs level							✓		
7.	Effluent weirs clean							✓*		
8.	Scum collection system working properly									✓
9.	Influent/effluent baffle system working properly									
10.	Chemical Used					Chemical Addition		✓		
11.	Effluent characteristics									

GENERAL CONDITION:	GOOD		FAIR		POOR	

COMMENTS:	* above

UNIT PROCESS:	SEDIMENTATION

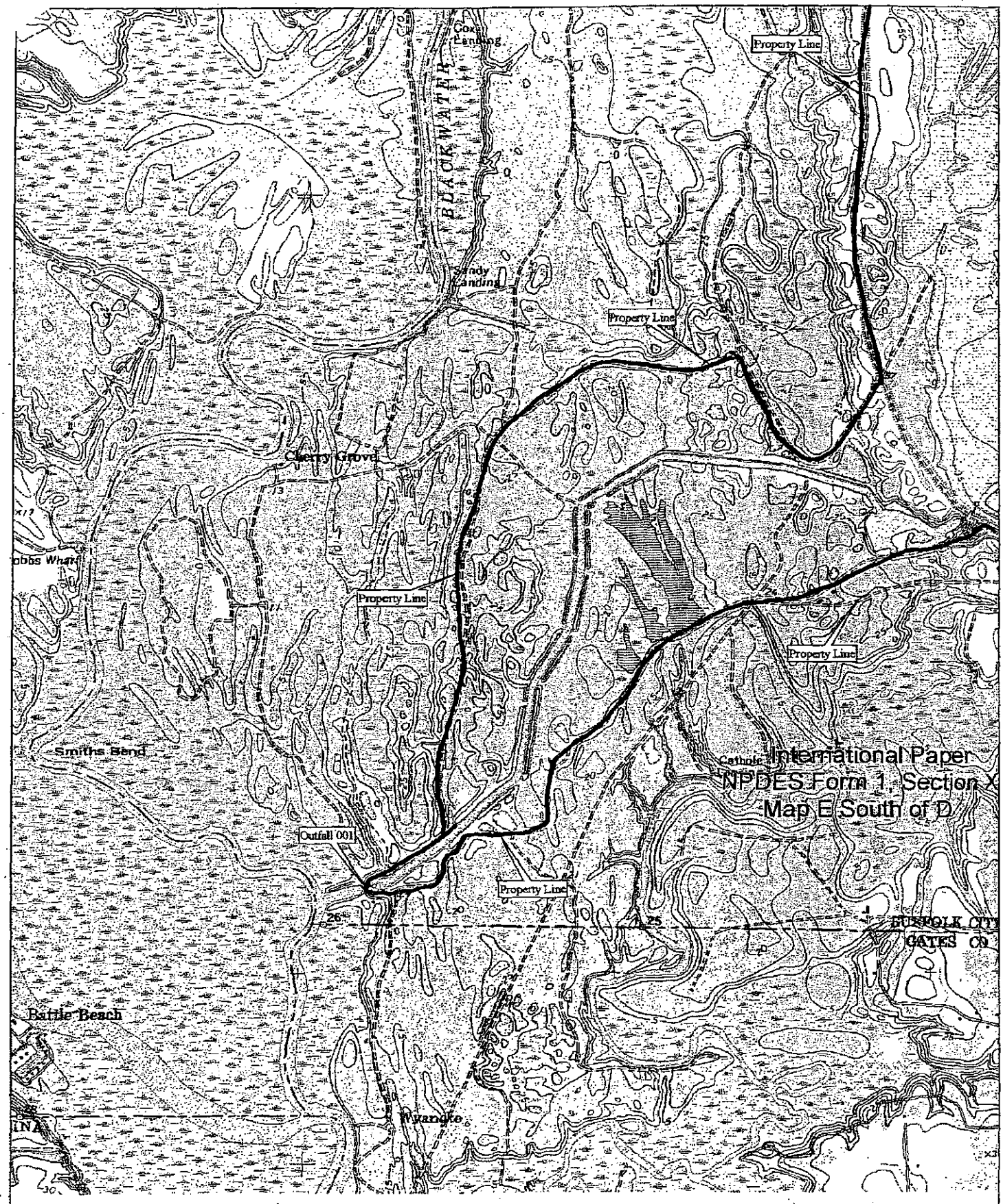
	PRIMARY		SECONDARY		TERTIARY			YES	NO	NA
1.	Number of units									
2.	Number units in operation									
3.	Proper flow distribution between units									
4.	Sludge collection system working properly?									
5.	Signs of short circuiting and/or overloads									
6.	Effluent weirs level									
7.	Effluent weirs clean									
8.	Scum collection system working properly									
9.	Influent/effluent baffle system working properly									
10.	Chemical Used					Chemical Addition				
11.	Effluent characteristics									

GENERAL CONDITION:	GOOD		FAIR		POOR	

COMMENTS:	

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP

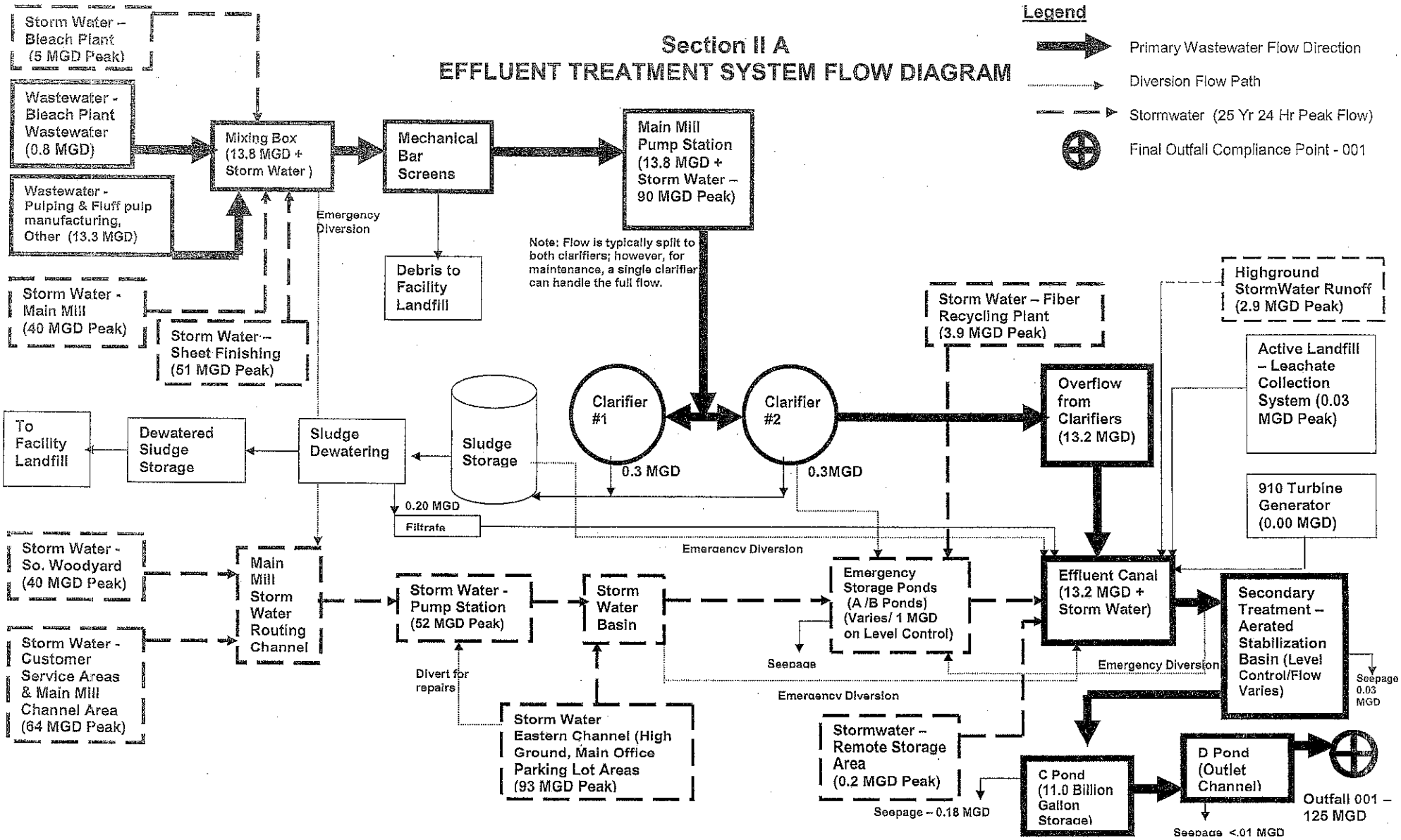


 950 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

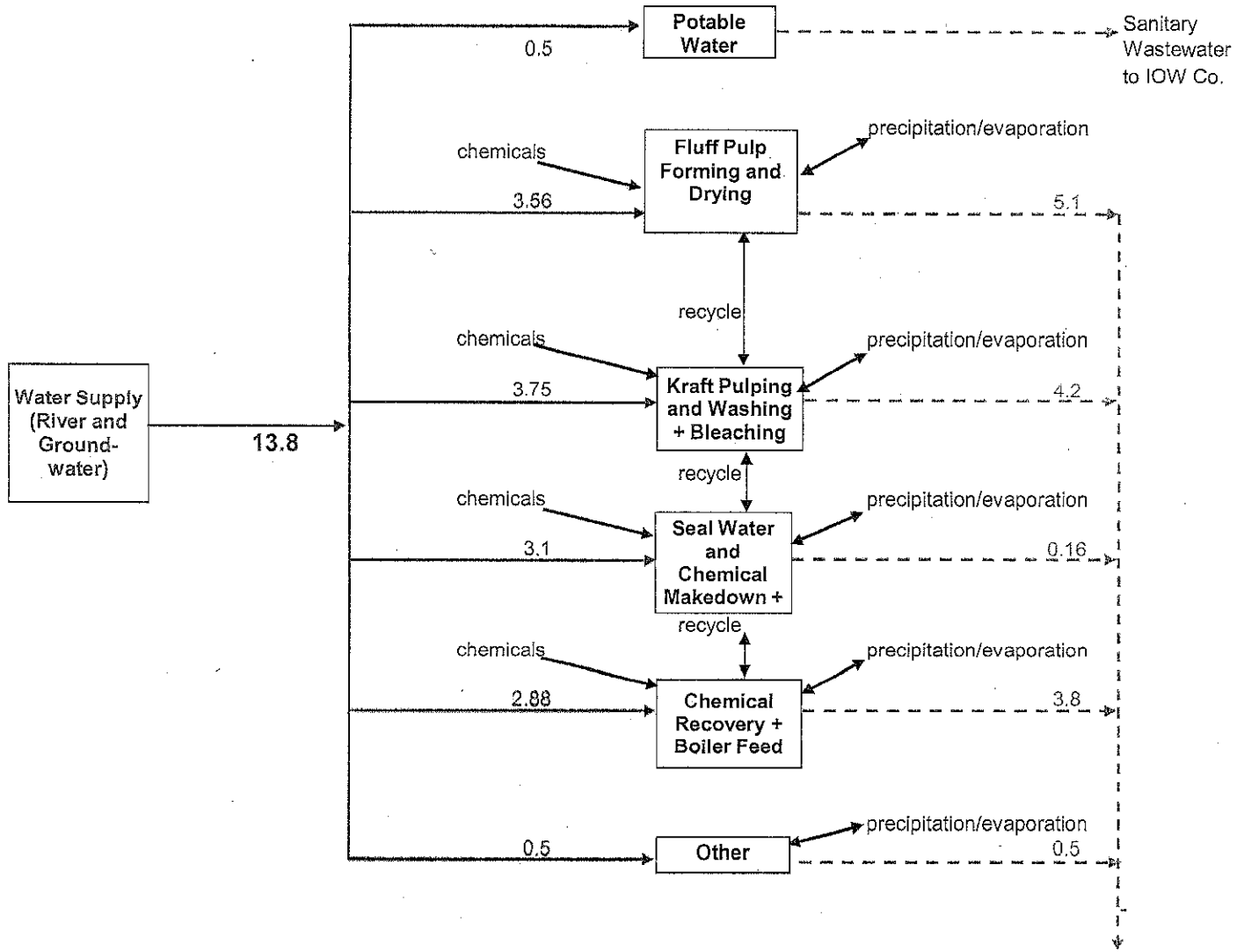
ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/ WATER BALANCE

Section II A
EFFLUENT TREATMENT SYSTEM FLOW DIAGRAM



Water Flow Line Drawing
Form 2C Section II.A



Legend

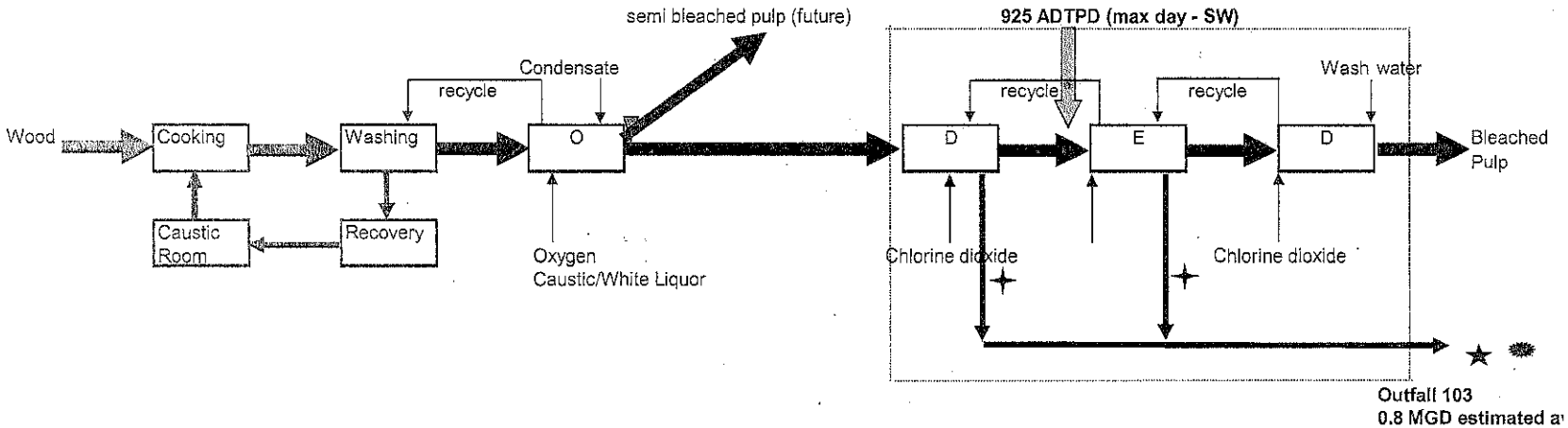
Fresh Water (River and/or Groundwater)

Wastewater

Flows are in million gallons per day (MGD)

Flows are estimated based project/ engineering balances

F Bleach Line
Outfall 103
Configuration (VATIP Tier 1 Compliant)
Softwood Furnish



Legend	O	Oxygen Stage
	D	Chlorine Dioxide Stage
		Bleach Plant as defined at 40 CFR Part 430.01c
		Reference Point for Production Defined at 40 CFR 430.01 n
		Kappa Number Monitoring Location and Compliance Point
		Compliance Point for the Bleach Line Outfall
		Monitoring Location for 2,3,7,8-TCDD, 2,3,7,8-TCDF and 12 chlorophenolics
		Monitoring Location for Chloroform
	ADTPD	Air Dried tons Per Day
	MGD	Million Gallons per Day
	SW	Softwood furnish

ATTACHMENT 4

TABLE I - DISCHARGE/OUTFALL DESCRIPTION

FORM 2 C - Section II.B INSERT

1. Outfall No.	2. Operations Contributing Flow		3. Treatment	
	a. Operation (list)	b. Average Flow (mgd)	a. Description	b. List Codes from Table 2C
			PRIMARY TREATMENT	
001	**Pulp Mill (SIC 2611)** (Includes woodyard, continuous digesters; chemical and heat recovery operations; turpentine processing; power and steam generation, pulp bleaching and fluff pulp forming and drying	13.8	Mechanical Bar Screens	1-T
			Screened Material to Landfill	5-Q
			Clarification	1-U
			Clarifier #1 - 230 ft diameter	
			2 - 800 gpm sludge pumps	
103	F Bleach Line (internal outfall)	0.80	Clarifier #2 - 205 ft diameter	
			2 - 800 gpm sludge pumps	
			Sludge Dewatering	5-C & 5-L
			2 - 2.0 Meter Belt Filter Presses w/ gravity thickeners	
001	**Other**		90 tons/day capacity each	
			Sludge Feed Tank (62,000 gals)	
			3 Centrifugal Sludge Feed Pumps	
	Sawmill Activities	0.001	Solids to Landfill	5-Q
001	**Stormwater Runoff (25/24Hr Peak)**		**SECONDARY TREATMENT**	
	Bleach Plant	5.00	Overflow from the clarifiers,	
	Main Mill	40.00	stormwater runoff & landfill	
	Cust. Svc. & Main Mill Channel Areas (7)	64.00	leachate, receive secondary	
	East Channel/High Gr/Main Off. Areas (7)	93.00	treatment as follows:	
	South Woodyard (7)	40.00		
	Sheet Finishing	51.00	**Aerated Stabilization Basin**	3 - B
	Highground Pond (7)	2.90	HRT = 7 days	
	Fiber Recycling Plant Area (7)	3.90	Total Aeration HP =1575 (available)	
	Remote Storage Pile (7)	0.17	Two Baffle Curtains	
001	**Misc**			
	910 Turbine Generator (7)	0.01	**Holding Pond (C Pond)**	3-G
			11 Billion Gallon Class II Dam	
	Active Landfill - Leachate (7)	0.03	for effluent storage from April - Oct	
			Discharge Channel (D Pond)	None
			Conveyance channel for effluent releases (Nov - Mar)	
			Outfall 001	4-A

Notes:

1) Flows indicated are based on project engineering estimates
2) Stormwater flows are peak values based on a report from Davis and Floyd, March 1997 and are based on a 25 Yr/24 hr rainfall event.
3) Stormwater flows are accounted for in the average flows to the Effluent Treatment System; the peak number indicated is estimated and is not included in this average number.
4) The Sawmill is not part of the facility proper
5) For further details, refer to the flow diagram.
6) Leachate flow provided is an estimated nominal flow (Solid Waste Facility Permit No 504 Part B Application)
7) Flow bypasses primary treatment. See Treatment System Flow Diagram for details

Form 2C - Section II.B
Internal Outfall Information

Outfall Number	Bleach Line	Bleaching Sequence	Fiber Furnish	Unbleached pulp Entering Bleach Plant: Maximum Daily Production (ADTPD)	Unbleached pulp Entering Bleach Plant: Long-term Avg Production (ADTPD)	Long-term Avg Flow (MGD)
103	F	ODED	SW	1000	925	0.8
	F	ODED (w/ semi)	SW	TBD	TBD	

ADTPD Air Dried Tons per Day
SW Softwood furnish
Semi Semi-bleached pulp comes off the O2 stage without entering the bleach plant
Flows are project estimates
Production rate as defined at 40 CFR 430.01n
TBD Future fluff pulp product to be determined at a later date

Form 2F, Item IV.B Narrative Description of Significant Materials
Form 2F, Item IV.C Description of Structural and Nonstructural Control Measures

Outfall 002 discharges into the Blackwater River at the north end of the millsite. It drains the North rail yard area. Tank cars containing chemicals used in the fluff pulp process are temporarily stored on these tracks until needed. Tank car unloading of pulping liquors, primarily black liquor and turpentine, occurs on a spur just south of the main tracks in the area designated for black liquor loading and unloading. Curbing around the loading and unloading area is present to prevent the possible release of liquors should an accidental spill or release occur.

Outfall 006 discharges into Washole Creek just west of the rail bridge at the south end of the facility. The drainage area is predominantly composed of unpaved surfaces and railroad bed. Tank cars containing chemicals used in the fluff pulp process are temporarily stored on these tracks until needed. The outfall pipe at 006 contains a valve that can be closed in the event of a spill. The valve operation is tested monthly.

Outfall 007 discharges into Washole Creek upstream of 006. The drainage area is unpaved surfaces and railroad bed. No chemical tank cars are stored here. The outfall pipe at 007 contains a valve that can be closed in the event of a spill. The valve operation is tested monthly.

Outfalls 008, 009, and 011 discharge into unnamed tributaries to Kingsale Swamp. They drain areas outside the dike surrounding the landfill as well as the capped portions of the landfill. Stormwater draining to these outfalls does not contact waste material sent to the landfill. Water that contacts the landill waste is segregated by dikes and berms and drains to a leachate collection system from which it is pumped to the industrial effluent system for ultimate discharge via outfall 001. Stormwater from outfalls 008 and 011 is directed through sedimentation basins prior to discharge.

Outfalls 012 and 013 discharge into storm ditches adjacent to county roads which eventually drain into Washole Creek. They drain a series of gravel lots used to park covered trailers which transport our finished product. There is no loading or unloading of product or material in these lots.

Outfall 014 drains gravel lots used as temporary laydown areas for construction materials (pipes, valves, etc.) and used to park covered trailers which transport our finished product.

Pollutants stored in rail cars in the drainage areas of outfalls 002 and 006: Sulfuric acid, pulping liquors (black, green and white), sodium hydrosulfide, sodium hydroxide and sodium chlorate. Of these, only sulfuric acid is a Section 313 Water Priority Chemical.

Nonstructural Control Measures: All outfalls are subject to monthly visual inspections, Stormwater Pollution Prevention Plan, SPCC Plan, Facility Emergency Response Plan, and employee training. Outfalls 008, 009 and 011 are further protected by weekly inspections of the landfill and its associated leachate collection system.

Outfall	Latitude			Longitude			Receiving Water
002	36	40'	45"	76	55'	00"	Blackwater River
006	36	40'	15"	76	54'	45"	Washole Creek
007	36	40'	15"	76	54'	45"	Washole Creek
008	36	40'	15"	76	52'	30"	Kingsale Swamp
009	36	40'	15"	76	52'	30"	Kingsale Swamp
011	36	41'	00"	76	51'	45"	Kingsale Swamp
012	36	40'	45"	76	54'	15"	Washole Creek
013	36	40'	45"	76	54'	30"	Washole Creek
014	36	40'	30"	76	54'	00"	Washole Creek

ATTACHMENT 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

TABLE II - INDUSTRIAL MAJOR EFFLUENT LIMITATIONS

OUTFALL # 001
Outfall Description: Process wastewater
SIC CODE: 2611

(X) Final Limits Effective Dates - From: Modification To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	MULTIPLIER OR PRODUCTION	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS[a]	
			MONTHLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD)[b]	3		NL	NA	NL	1/D	MEAS
Flow, Seasonal (MG)[b]	2		NA	NA	14000	1/M	MEAS
pH (S.U.)[d]	2		NA	6.0	9.0	1/W	GRAB
TSS (mg/l)[c][d]	3		136	NA	272	1/W	GRAB
TSS**6 (lb/sea)	2		NA	NA	2.88	1/M	GRAB
BOD5 (mg/l)[c][d]	3		66	NA	132	1/W	GRAB
BOD5**6 (lb/sea)	2		NA	NA	4.4	1/M	GRAB
COD (mg/l)[c]	3		NL	NA	NL	1/M	GRAB
Color, PCU	3		NL	NA	NL	1/W	GRAB
Nitrogen, Total as N (mg/l)	3		NL	NA	NL	1/M	GRAB
Phosphorus, Total as P (mg/l)	2		2	NA	NL	1/W	GRAB
Phosphorus, Total**6 (lb/sea)	3		NA	NA	0.2	1/M	GRAB
Ammonia, as N (mg/l)[c]	2		2.15	NA	3.19	1/W	GRAB
Ammonia, as N**6 (lb/sea)[c]	2		0.22	NA	0.32	1/M	GRAB
2,3,7,8-TCDD (pg/l)[a][c]	4		0.12	NA	0.12	1/SEA	GRAB
2,3,7,8-TCDD**-5 (lb/sea)[a][c]	4		NA	NA	1.1	1/SEA	GRAB
2,3,7,8-TCDF (pg/l)[a][c]	3		NA	NA	NL	1/SEA	GRAB
2,3,7,8-TCDF**-5 (lb/sea)[a][c]	3		NA	NA	NL	1/SEA	GRAB
AOX (mg/l)[c][d]	1		133	NA	280	1/M	GRAB
AOX (lb/season)[c]	1		NL	NA	723,000	1/M	GRAB

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY;
1/Season = November 1 – March 31.
[a] See Special Condition I.B.11 for additional information concerning sampling methodology.
[b] Flow rate shall be measured by daily recording of the settings on properly calibrated discharge gates.
[c] See Special Conditions I.B.6 and I.B.7 for additional information concerning Quantification Levels (QLs) and compliance reporting.
[d[See Sepcial Condition I.B.9 for monitoring frequency requirements

The bases for the limitations codes are:

1. Federal Effluent Guidelines
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment
4. North Carolina Water Quality Standards (NCAC, Ch.2, Subch. 2B, ɔ.0208)

TABLE II - INDUSTRIAL MAJOR EFFLUENT LIMITATIONS

OUTFALL # 103
Outfall Description: F bleach plant effluent
SIC CODE: 2611

(X) Final Limits Effective Dates - Modification To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	MULTIPLIER OR PRODUCTION	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS[a]	
			MONTHLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD)[b]	3		NL	NA	NL	1/M	MEAS
2,3,7,8-TCDD (pg/l)[c]	1		NA	NA	ND	1/Year	GRAB
2,3,7,8-TCDF (pg/l)[c]	1		NA	NA	31.9	1/Year	GRAB
Chloroform (ug/l)[c]	3		NL	NA	NL	1/Year	GRAB
Chloroform (g/day)[c]	1		3650	NA	6100	1/Year	GRAB
Trichlorosyringol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
3,4,5-Trichlorocatechol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
3,4,6-Trichlorocatechol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
3,4,5-Trichloroguaiacol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
3,4,6-Trichloroguaiacol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
4,5,6-Trichloroguaiacol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
2,4,5-Trichlorophenol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
2,4,6-Trichlorophenol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
Tetrachlorocatechol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
Tetrachloroguaiacol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
2,3,4,6-Tetrachlorophenol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
Pentachlorophenol (ug/l)[c]	1		NA	NA	ND	1/Year	GRAB
Kappa Annual Average-Softwood [d]	1		20	NA	NA	1/M	GRAB
Kappa Monthly Average[d]	3		NL	NA	NA	1/M	GRAB

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/Year = January 1 – December 31.

[a] See Special Condition I.B.12 for additional information concerning sampling methodology.
[b] Flow rate shall be determined by measurement devices when available, and in the absence of such devices, by flow balances around and within the bleach plant sewer. All information used to determine flow rates shall be retained in accordance with Part II.B.
[c] See Special Conditions I.B.6 and I.B.7 for additional information concerning Quantification Levels (QLs) and compliance reporting.
[d] See Special Condition I.B.13 for additional information concerning Kappa Number measurement and reporting.

The bases for the limitations codes are:

1. Federal Effluent Guidelines
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - INDUSTRIAL (MAJOR/MINOR) EFFLUENT LIMITATIONS

OUTFALL # 010 and 015
Outfall Description: untreated fresh groundwater resulting from periodic flushing of the water supply line

SIC CODE: 2611

(X) Final Limits Effective Dates - From: Modification To: Expiration

PARAMETER & UNITS	BASIS FOR LIMITS	MULTIPLIER OR PRODUCTION	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
NO MONITORING REQUIRED	3						

THESS OUTFALLS SHALL CONTAIN UNTREATED FRESH GROUNDWATER WHERE NO MONITORING IS REQUIRED. THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER OR STORMWATER FROM THESE OUTFALLS.

1. Federal Effluent Guidelines
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

STORMWATER

TABLE II - STORMWATER EFFLUENT LIMITATIONS

OUTFALL # 002, 006, 007, 008, 009, 011, 012, 013, 014

Outfall Description: 002 - storm water only from North rail yard area to Blackwater River; 006, 007 - storm water only from south end of facility to Washole Creek; 008, 009, 011 - storm water only from natural areas outside of landfill dike to Kingsale Swamp; 012, 013, 014 - storm water only from trailer parking area(s) (012 and 013) and from gravel lots for construction material and trailer storage (014) to Washole Creek

SIC CODE: 2611

THESE OUTFALLS SHALL CONTAIN STORMWATER RUNOFF ASSOCIATED WITH A REGULATED INDUSTRIAL ACTIVITY WHERE NO MONITORING IS REQUIRED, INCLUDING VISUAL MONITORING. THERE SHALL BE NO DISCHARGE OF PROCESS WASTEWATER FROM THESE OUTFALLS. THE PERMITTEE SHALL IMPLEMENT PROPER STRUCTURAL AND/OR NON-STRUCTURAL BMP's TO CONTROL POLLUTANTS FROM THESE OUTFALLS. SEE PART I.D.

(1) Timber Products
(2) Paper & Allied Products
(3) Chemical & Allied Products
(4) Asphalt Paving/Roofing Matls. & Lubricant
(5) Glass, Clay, Cement, Concrete & Gypsum Products
(6) Primary Metals
(7) Metal Mining (Ore Mining & Dressing
(8) Coal Mines & Coal Mining Related
(9) Oil & Gas Extraction & Petroleum Refineries
(10) Hazardous Waste Treatment, Storage, Disposal
(11) Landfills, Land Application Sites & Open Dumps
(12) Automobile Salvage Yards
(13) Scrap/Waste Recycling
(14) Steam Electric Power Generating, Inc. Coal Handling Areas
(15) Motor Freight, Passenger, Rail, U.S. Postal Transportation & Petroleum Bulk Oil Stations and Terminals
(16) Water Transportation With Maintenance and/or Equipment Cleaning
(17) Ship/Boat Building or Repairing
(18) Vehicle Maintenance, Equipment Cleaning or Deicing Areas At Air Transportation Facilities
(19) Treatment Works
(20) Food & Kindred Products
(21) Textile Mills, Apparel & Other Fabric Products Mfg.
(22) Wood & Metal Furniture and Fixture Mfg.
(23) Printing & Publishing
(24) Rubber, Miscellaneous Plastic Products & Miscellaneous Mfg.
(25) Leather Tanning & Finishing
(26) Fabricated Metal Products
(27) Transportation Equipment, Industrial or Commercial Machinery Mfg.
(28) Electronic & Electrical Equipment and Components, Photographic & Optical Goods Mfg.
(29) Nonclassified Facilities

ATTACHMENT 6

EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ ANTIDEGRADATION/ANTIBACKSLIDING

VPDES PERMIT PROGRAM

EFFLUENT LIMITATIONS AND MONITORING RATIONALE

The facility is subject to the federal Pulp, Paper and Paperboard Point Source Category effluent limitations guidelines (ELG) regulations at 40 CFR Part 430, General Provisions, and 40 CFR Part 430 Subpart B, Bleached Papergrade Kraft and Soda Subcategory, in addition to applicable Virginia water laws and regulations. The federal regulations affect outfall 001 and one internal outfall, 103. A copy of these applicable federal regulations is provided in this Attachment.

Internal Outfalls

Outfall 103 (F Bleach Line)

The applicant has enrolled its F bleach line in the VATIP at the Tier I level and has qualified as Advanced ECF (Elemental Chlorine-Free). Bleach plant effluent from the F Bleach Line is regulated under 40 CFR 430 and must meet Best Available Technology (BAT) effluent limitations imposed by 40 CFR 430, particularly 430.24(b) (VATIP) and 430.02 (monitoring requirements), at the point where the wastewater leaves the bleach plant. The plant has achieved compliance with the requirements, and the limits were initially placed in the permit effective January 19, 2000. The federal BAT minimum monitoring frequency requirements under 40 CFR 430 are no longer applicable, as 40 CFR 430.02(c) for plants enrolled in the VATIP specifies that monitoring at the specified frequencies shall continue for a duration of five years from the date the permit first included applicable limitations from subpart B. The permittee had asked that monitoring for those parameters addressed by 430.02 be discontinued altogether; however, 40 CFR 122.44(i) requires at least annual monitoring to determine compliance with the Federal ELG's for those parameters addressed by the ELG which contain limitations. Therefore, monitoring cannot be discontinued altogether. Monitoring for the applicable parameters was reduced effective at the issuance of the permit, to the maximum extent allowable under 122.44(i). The sample type will be a grab sample. It is a staff BPJ decision that for facilities enrolled in the VATIP program that have demonstrated five years of compliance, a grab sample is sufficient to determine continued compliance with the ELG limits. Based on the list of parameters addressed in 40 CFR 430.02(c), Kappa number is not included in the list of parameters where monitoring is reduced after five years.

Rationale for Effluent Limitations

Flow: The monitoring frequency is once per month and the Daily Maximum and Monthly Average effluent limitations are NL, based on BPJ. Flow balances are routinely used at the bleach line to control the bleaching process and are considered to be sufficiently accurate for effluent monitoring purposes, if direct measurements are not available. Therefore, flow rate shall be determined by measurement devices when available, and in the absence of such devices, by flow balances around and within the bleach plant sewer. All information used to determine flow rates shall be retained in accordance with Part II.B to allow later on-site inspection of flow measurement records. The measurement of flow is necessary to evaluate the potential impact of the discharge on receiving waters, including but not limited to the calculation of pollutant mass from concentration data, as well as to verify that federal mass-based ELGs have been appropriately implemented through conversion to concentration-based effluent limitations for this source.

TCDD, TCDF, chloroform, and the 12 chlorinated phenolic pollutants: Limitations are being established based on the federal ELGs, as follows. Because the F bleach line will employ Advanced ECF bleaching technology to achieve Tier I limitations, federal regulations at 40 CFR 430.02(c), footnote (f) allow suspension of monitoring for these pollutants after one year of monitoring as an incentive for enrolling in the VATIP. However, based on the minimum monitoring required under 40 CFR 122.44(i)(2), monitoring for these pollutants will be continued at a once per year frequency. Effluent limitations are being maintained at the same numerical values as for the prior interim monitoring period to ensure that the F bleach line continues to meet the baseline BAT level of performance, and are restated below:

Parameter	Daily Maximum	Monthly Average	Quantification Level (QL)
2,3,7,8-TCDD	ND*		10 pg/l**
2,3,7,8-TCDF	31.9 pg/l		10 pg/l
Trichlorosyringol	ND		2.5 ug/l
3,4,5-Trichlorocatechol	ND		5.0 ug/l
3,4,6-Trichlorocatechol	ND		5.0 ug/l
3,4,5-Trichloroguaiacol	ND		2.5 ug/l
3,4,6-Trichloroguaiacol	ND		2.5 ug/l
4,5,6-Trichloroguaiacol	ND		2.5 ug/l
2,4,5-Trichlorophenol	ND		2.5 ug/l
2,4,6-Trichlorophenol	ND		2.5 ug/l
Tetrachlorocatechol	ND		5.0 ug/l
Tetrachloroguaiacol	ND		5.0 ug/l
2,3,4,6-Tetrachlorophenol	ND		2.5 ug/l
Pentachlorophenol	ND		5.0 ug/l
Chloroform, g/d	3650	6100	
Chloroform, ug/l	NL	NL	

*ND = Non-detectable at the Quantification Level specified. Detection at the Quantification Level shall constitute an exceedance of the effluent limitation.

**pg/l = picograms per liter

AOX: The federal ELG for AOX discharged from the F bleach line applies to the facility's combined final effluent at Outfall 001 and is based on the AOX ELGs for all bleach lines. See Outfall 001 below for determination of AOX effluent limitations.

Kappa Number: Limitations are established based on the federal ELGs, as follows. The Kappa Annual Average-Softwood limitation of 20 S.U. is continued, based on the federal ELGs. The Kappa Annual Average-Hardwood is removed form the permit during the 2012 modification because the permittee has stated that they will not be doing hardwood at the repurposed mill, only softwood. Based on BPJ, the Kappa Annual Average effluent limitations are being expressed as a 12-month rolling average, and the monitoring frequency is monthly, to allow monthly tracking of the facility's annual average Kappa Number. Additionally, based on BPJ, the Kappa Monthly Average effluent limitation of NL is continued to allow tracking of the individual monthly Kappa Number values that comprise the 12-month rolling average.

Final Effluent Outfalls

Outfall 001

Process wastewater is stored in C pond and will be discharged via "D" pond during discharge seasons. Process wastewater will be generated from one internal bleach line at the plant as part of the repurposing of the plant. Limits will be the same as the previous permit and will be based on processes and flows that are similar to past operations at the plant. Specific changes in internal processes and bleach-line specific production flows will be addressed at the internal outfall for the operational bleach line.

The Blackwater River at the location of Outfall 001 is identified as a Tier 1 water and is listed on the 2004 305(b)/303(d) Category 5 TMDL list based on non-attainment of the dissolved oxygen standard and mercury in fish tissue (see Attachment 10). Because this permit limits routine seasonal discharges from outfall 001 to the months of November through March inclusive (see Special Condition I.B.16), all computations involving stream flow data will be limited to this discharge season. The receiving stream flow statistics are as follows:

Blackwater River		
1Q10	0.22 mgd	(November-March)
7Q10	1.36 mgd	(November-March)
30Q5	29.3 mgd	(November-March)
Mean Annual Flow	702.2 mgd	(November-March at the VA-NC state line)

Flow: The measurement of flow is necessary to evaluate the potential impact of the discharge on receiving waters, including but not limited to the calculation of pollutant mass from concentration data, the consideration of mixing zone aspects and Instream Waste Concentration, evaluation of potential acute and chronic toxicity effects, and evaluation of wastewater handling and/or treatment system capacities. The effluent limitation for flow rate in MGD is established as NL Daily Minimum, NL Monthly Average and NL Daily Maximum, and the monitoring frequency is once per day, based on BPJ. The flow rate shall be accurately measured by daily recording of the settings on properly calibrated discharge gates and shall not be estimated. The effluent limitation for cumulative flow is established at 14 billion gallons (14,000 MG) per discharge season, based on the state Water Quality Management Plan, and the monitoring frequency is monthly, based on BPJ.

COD: The Water Quality Standards at 9 VAC 25-260-20 prohibit the presence of substances in amounts which interfere with designated uses and authorize the control of toxic substances or substances which may interfere with designated uses. EPA has indicated that it intends to promulgate COD limitations for 40 CFR 430 Subpart B mills (which would include this facility) in a later rulemaking. The 2004 edition of the 40 CFR has reserved the limits for COD at this time. COD is a broad measure of organic content, which includes toxic organic materials that are not readily biodegraded and, hence, are not generally measured by the BOD5 test. Therefore, the Daily Maximum and Monthly Average effluent limitations for COD are NL, and the monitoring frequency is once per month, based on BPJ.

BOD5: The Water Quality Standards at 9 VAC 25-260-20 prohibit the presence of substances in amounts which interfere with designated uses and authorize the control of substances which may interfere with designated uses. The federal ELGs at 40 CFR 430 Subpart B (Bleached Papergrade Kraft) establish mass-based best practicable control technology (BPT) limitations for BOD5 based on facility product types and quantities. For non-continuous dischargers, the ELGs are stated as an

annual average mass-based limitation. The monitoring frequency is not specified. The applicable state Water Quality Management (WQM) Plan (see Attachment 9: Outfall 001 information) limits BOD5 to a maximum of 4.4 million pounds per year. Based on BPJ, the annual average BOD5 limitation is being expressed as a monthly average because the facility accumulates its daily discharge in a holding pond and does not discharge for an entire year. The Monthly Average BOD5 limitation is being set at 66 mg/l, based on the federal ELGs (see table below). The Daily Maximum BOD5 limitation is being set at 132 mg/l, which is equal to twice the monthly average, based on BPJ, taking into account typical variability experienced by industrial wastewater treatment systems. The monitoring frequency is once per week, based on BPJ, because the facility's 11-billion gallon storage pond (C Pond) significantly dampens potential daily effluent variability. Additionally the discharge season cumulative maximum BOD5 limitation is being set at 4.4 million pounds, based on the Virginia WQM Plan, with a monitoring frequency of once per month.

Monthly Average BOD5

BOD5 Limitation based on BPT ELGs at 40 CFR .430					
Product Type	ELG (lb/1000 lb)	Production Rate (Tons/day)	Annual BOD5 Limitation (lb/yr)	Annual Final Effluent Volume (million gal)	BOD5 Limitation (mg/l)
Market Pulp	4.52	0	0	NA	0
Paperboard	3.99 (.430.22)	350	1,019,445	11,289 1487.57	10.8
Pulp & Fine Papers	3.09 (.430.22)	2650-350= 2300	5,188,110	11,289 9521.43	55.1
				Total BPT Limit	65.9

TSS: The Water Quality Standards at 9 VAC 25-260-20 prohibit the presence of substances in amounts which interfere with designated uses and authorize the control of substances which may interfere with designated uses. The federal ELGs at 40 CFR 430 Subpart B (Bleached Papergrade Kraft) establish mass-based best practicable control technology (BPT) limitations for TSS based on facility product types and quantities. For non-continuous dischargers, the ELGs are stated as an annual average mass-based limitation. The monitoring frequency is not specified. The applicable state Water Quality Management (WQM) Plan (see Attachment 9: Outfall 001 information) limits TSS to a maximum of 2.88 million pounds per year. Based on BPJ, the annual average TSS limitation is being expressed as a monthly average because the facility accumulates its daily discharge in a holding pond and does not discharge for an entire year. The Monthly Average TSS limitation is being set at 136 mg/l, based on the federal ELGs (see table below). The Daily Maximum TSS limitation is being set at 272 mg/l, which is equal to twice the monthly average, based on BPJ, taking into account typical variability experienced by industrial wastewater treatment systems. The monitoring frequency is once per week, based on BPJ, because the facility's 11-billion gallon storage pond (C Pond) significantly dampens potential daily effluent variability. Additionally the discharge season cumulative maximum TSS limitation is being set at 2.88 million pounds, based on the Virginia WQM Plan, with a monitoring frequency of once per month.

Monthly Average TSS

TSS Limitation based on BPT ELGs at 40 CFR .430					
Product Type	ELG (lb/1000 lb)	Production Rate (Tons/day)	Annual TSS Limitation (lb/yr)	Annual Final Effluent Volume (million gal)	TSS Limitation (mg/l)
Market Pulp	9.01	0	0	NA	0
Paperboard	7.09 (.430.22)	350 (see Att. 10, 7/10/99 E-mail)	1,811,495	11,289 (see Form 2C, Part II.C)	19.2
Pulp & Fine Papers	6.54 (.430.22)	2650-350= 2300 (see Form 2C, Part III)	10,980,660	11,289	116.6
				Total BPT Limit	135.8

Color: The Water Quality Standards at 9 VAC 25-260-20 prohibit the presence of substances in amounts which interfere with designated uses and authorize the control of substances that produce color. Neither the Virginia Water Quality Standards nor the applicable federal ELGs at 40 CFR .430 contain numerical limitations or monitoring frequencies for color. Therefore, based on BPJ, the Monthly Average and Daily Maximum limitations for color are established as NL, and the monitoring frequency is weekly.

pH: The effluent pH is limited to 6.0-9.0, based on applicable Water Quality Standards. The monitoring frequency is weekly, based on BPJ. Measurement of effluent pH is necessary to confirm proper treatment, characterize the discharge and adequately evaluate its potential impact on receiving waters. The Water Quality Standards at 9 VAC 25-260-50 limit pH in surface waters to the range of 6.0-9.0. The federal ELGs at 40 CFR .430 limit pH to the range 5.0-9.0 at all times, and the monitoring frequency is not specified.

Total Nitrogen: The Daily Maximum and Monthly Average NL monitoring requirements for Total Nitrogen in the previous permit are being continued, the monitoring frequency is being retained at monthly, based on BPJ, for the following reasons: (1) there is no water quality criterion for total nitrogen in waters other than Chesapeake Bay tributaries; (2) monitoring results during the previous permit term indicate only low levels of total nitrogen; and (3) the permit will continue to limit ammonia-nitrogen, for which a water quality criterion does exist.

Total Phosphorus: The Blackwater River is identified at 9 VAC 25-260-470 as a Nutrient Enriched Water. There is no freshwater water quality criterion for phosphorus. The Policy for Nutrient Enriched Waters at 9 VAC 25-40-30(A) requires a monthly average total phosphorus effluent limitation of 2 mg/l. Based on BPJ, the Daily Maximum limitation is NL to allow monitoring of peak measured values. The weekly monitoring frequency in the previous permit is being retained, based on BPJ. Additionally, based on BPJ, a seasonal maximum limitation of 200,000 pounds is being retained; this was previously calculated based on a seasonal discharge flow of 11,289 million gallons during the last permit reissuance. In order to

~~flow of 11,289 million gallons during the last permit reissuance. In order to~~ maintain nutrient loadings to nutrient enriched receiving streams, the limit will not be recalculated based on recent flows.

$$(2\frac{mg}{l})(11,289)(8.34) = 200,000lbs$$

Ammonia-Nitrogen: All references to ammonia in this section refer to ammonia as N. The Blackwater River at Outfall 001 is identified as a Nutrient Enriched Water. The relevant receiving stream water quality statistics are as follows:

Hardness	48.1 mg/l	(90th %ile)
pH	7.00 SU	(90th %ile)
Temp	25.13 □C	(90th %ile)

This permit specifically allows the actual Instream Waste Concentration (IWC) to exceed 50% (see Special Condition I.B.18.b). Therefore, by definition the stream is considered to be *effluent dominated*.

Determination of Acute WLA (WLAa)

For effluent-dominated streams, the steady state complete mix equation is applied

$$WLAa(mg/l) = \frac{Co(Qe+Qs) - (Cs)(Qs)}{Qe}$$

to determine WLAa, using one-half the 1Q10 for Qs (=0.11):
where: WLAa = acute wasteload allocation
Qs = critical stream flow = (0.5)1Q10 = 0.11 mgd
Qe = maximum 30-day average effluent flow = 210.3 mgd
Co = in-stream acute ammonia criterion = 23.1 mg/l (see Attachment 9)
Cs = stream background ammonia concentration = 0.09 mg/l (see Attachment 9: STORET data)

$$WLAa(mg/l) = \frac{23.1(210.3+0.11) - (0.09)(0.11)}{210.3} = 23.11mg/l$$

Thus:
Determination of Chronic WLA (WLAc)

For effluent-dominated streams, the WLAc is calculated by the above steady state complete mix method using the chronic ammonia criterion of 2.46 mg/l and one-half the 7Q10 for Qs (=0.68 mgd):

$$WLAc(mg/l) = \frac{2.46(210.3+0.68) - (0.09)(0.68)}{210.3} = 2.47mg/l$$

The previous limits are being retained, as follows: Monthly Average 2.15 mg/l and Daily Maximum 3.19 mg/l, with the monitoring frequency retained at once per week; and Seasonal Monthly Average 220,000 pounds and Seasonal Maximum 320,000 pounds, with a monitoring frequency of once per month, based on BPJ.

Dioxin (2,3,7,8-TCDD): The Virginia water quality standard for dioxin is 1.2 parts per quadrillion (ppq) for the protection of human health, which equals 1.2 picograms per liter (pg/l) (see 9 VAC 25-260-150). The North Carolina human health standard is 0.000014 nanograms per liter, or stated for comparison purposes, 0.014 pg/l. Thus, the North Carolina standard is more restrictive. Because Outfall 001 discharges within one stream mile of the Virginia-North Carolina state line, the North Carolina standard and stream flow value will be used to derive the permit limitations.

Determination of Human Health WLA (WLAh)

WLAh is calculated by the steady state complete mix method using the North Carolina dioxin standard of 0.014 pg/l and the mean annual Chowan River flow for Qs (=1537 mgd) when evaluating carcinogenic materials. Because the North Carolina standard is a □never-to-be-exceeded□ standard, the maximum effluent flow rate of 500 mgd indicated by the applicant will be used for Qe. No

$$WLAh(pg/l) = \frac{0.014(500+1537)-(0)(1537)}{500} = 0.057 pg/l(ppq)$$

allowance for any background dioxin concentration will be made. Thus:
To ensure that a WLAh of 0.057 pg/l is protective of the Virginia standard, WLAh is calculated using the Virginia standard, the mean annual seasonal flow of

$$WLAh(pg/l) = \frac{1.2(500+702.2)-(0)(702.2)}{500} = 2.9 pg/l(ppq)$$

702.2 mgd for the Blackwater River at the point of discharge:
Since the wasteload allocation is lower using the North Carolina standard, the Virginia standard is protected.

To derive the appropriate limit the WLA computer model was forced by using a single datum of 99. The model indicates that a Monthly Average and Daily Maximum limit of 0.115 ppq are necessary to protect human health (see Attachment 4: Dioxin model results for Outfall 001). Therefore, the Monthly Average and Daily Maximum limitations for dioxin are set at 0.12 pg/l (ppq) (0.115 rounded to two significant digits), and the QL is set at 10 ppq. A measured value equal to or greater than the QL shall be considered to exceed the limitation.

The Seasonal Maximum mass limitation is 1.1×10^{-5} lb. This value is continued from the previous permit. The Seasonal Maximum mass limitation was derived using the Daily Maximum limitation of 0.115 ppq and the maximum reported seasonal flow of 11,289 million gallons, as follows:

$$(0.12ppq)(11,289)(8.34) = (.12 \times 10^{-9}\ ppm)(11,289)(8.34) = 1.1 \times 10^{-5}\ lb$$

The monitoring frequency for dioxin at Outfall 001 is being continued from the previous permit at once per discharge season, with the requirement that the monitoring be performed during the final 14 days of the discharge season, when the facility's C storage pond is nearly empty, retention time is lowest and potential dilution from stormwater is lowest.

Furan (2,3,7,8-TCDF): Neither the Virginia nor the North Carolina water quality standards establish a criterion for furan (2,3,7,8-TCDF). The federal ELGs at 40 CFR 430.24(a)(1) establish a daily maximum technology-based effluent limit of 31.9 pg/l (ppq) for bleach line effluents, which has been applied at Outfalls 101, 102 and 103 (see Internal Outfall section above). The previous permit contained a monthly NL monitoring-only requirement for furan at Outfall 001. DMR data from the previous permit term show Daily Maximum furan concentrations ranging from zero to 7.1 ppq, which are all less than the method quantification level (QL) of 10 ppq (see Attachment 4: DMR data tables). Therefore, based on BPJ, the effluent limitation for 2,3,7,8-TCDF is being retained as NL.

Based on BPJ, the monitoring frequency for furan at Outfall 001 is being continued at once per discharge season, with the requirement that the monitoring be performed during the final 14 days of the discharge season, when the facility's C storage pond is nearly empty, retention time is lowest and potential dilution from stormwater is lowest. The seasonal mass limitation of NL in the previous permit is also being retained, and the monitoring frequency is being retained at once per discharge season, based on BPJ.

AOX: Because the facility is a seasonal discharger and is prohibited from discharging final effluent during specific periods of time, it is classified as a non-continuous discharger under 40 CFR 430.01(k)(2). The monitoring frequencies and effluent limitations for AOX are determined by the particular subsections of 40 CFR 430.02 and 430.24, respectively, applicable to the bleach lines at various points in time for non-continuous dischargers. The AOX effluent limitations, however, apply at end-of-pipe (Outfall 001). The numeric AOX effluent limitations applicable to each bleach line during each monitoring period are additive and are combined to determine the total AOX effluent limitation for Outfall 001. Monitoring frequency was 1/week based on Effluent Guidelines, Effective April 17, 2006, the monitoring frequency was reduced to 1/month, based on BPJ, and allowable under 40 CFR 430.02.

The point of compliance is end-of-pipe at Outfall 001. The numeric values for the AOX limitations are determined by summing the applicable limitations for AOX for each of the contributing bleach lines. With this modification, only the F Bleach Line is being put into service; however, it is possible that other lines could be put into service prior to permit reissuance in 2015. While the F bleach line is addressed in the permit as the only operational bleach line at the plant, AOX calculations and final effluent limitations at the external outfall 001 will remain per the permit during the previous operational phase at the mill and during the recent closed period at the mill. The concentration limits of 133 mg/l monthly average and 280 mg/l daily max will remain during this modification, as they did at reissuance when the plant was in a non-operational period. All AOX calculations and limitations will be recalculated at permit reissuance.

The resulting concentration-based annual average AOX limitation is 133 mg/l. Based on BPJ, because the discharge is non-continuous and there is no practical method for determining the annual average of this non-continuous discharge, the annual average effluent limitation for AOX is being expressed as a Monthly Average AOX limitation of 133 mg/l.

Expression of the Annual Average AOX limitation in mass units is accomplished by calculating the allowable annual mass from the contributing bleach lines. In this case, the AOX mass limitation is not changing from the permit reissuance limitation. The resulting mass-based Annual Average AOX limitation is 723,000 lb/yr. Based on BPJ, this annual average effluent limitation for AOX is being expressed as a Seasonal

Maximum limitation of 723,000 lb/season, because there is no practical method for determining the annual average of this non-continuous discharge. As with the concentration limitations for AOX, the mass limitation for AOX will be recalculated at the permit reissuance in 2015. This will allow for a calculation based on all processes contributing to the final discharge at the repurposed plant.

Dissolved metals data were not available for outfall 001; total metals data submitted with the application for reissuance are as follows:

Antimony	0.2 ug/l
Arsenic	2.7 ug/l
Cadmium	0.21 ug/l
Copper	4.8 ug/l
Lead	0.44 ug/l
Mercury	< 0.2 ug/l
Nickel	8.4 ug/l
Zinc	11.7 ug/l

All metals concentrations are below the freshwater acute and chronic numeric water quality criteria, and would not cause a violation of the State's water quality standards at these concentrations. No metals effluent limitations are included in this reissued permit.

No organic compounds were detected above method detection levels using methods 624/625.

Tue 2/21/2012 1:04 PM

Sheryl and Raye –

Based on my proposal to only change the BOD and TSS concentration limits relative to removing the deinking contribution to the final discharge, here is a summary of the change in BOD and TSS limits:

TSS:

2010 Permit Reissuance: 153 mg/l monthly average, 306 mg/l daily max, measured 1/week

2012 Permit Modification: 136 mg/l monthly average, 272 mg/l daily max, measured 1/week

BOD:

2010 Permit Reissuance: 79 mg/l monthly average, 158 mg/l daily max, measured 1/week

2012 Permit Modification: 66 mg/l monthly average, 132 mg/l daily max, measured 1/week

The monthly average limits for TSS and BOD are calculated using Effluent Guideline limits and daily production rate to come up with a lb per year limit, then dividing effluent flow and a mathematical constant to get a concentration limit. The daily max concentration limits are 2X the monthly average. I used the production values from the plant operational period with the exception of removing the deinking process, which lowered the concentration limits to the values you see above for the 2012 Permit Modification.

AOX:

No change for this modification. Final AOX limits are based on a calculated limit for each bleach line and then combined for an additive final limit at the final discharge. If recalculated, the final limit would be roughly 1/3 of the current limit, based on the use of only one bleach line. The limit would be a rough estimate based on estimated projected flows and a second fluff pulp product to be determined at a later date, from the information Raye provided. Once we know the true flow and actual production rate of the F bleach line, we can calculate a more representative limit based on long-term actual flows.

For all the above parameters, I could have used Raye's production rate he supplied, but there is a good possibility IP will never actually discharge under those production numbers, so there seems little benefit to use those production rates in this modification. I would propose to use all new production rates in a future modification for another repurposing product or at reissuance of the permit in 2015, once all repurposing is set and limits calculated would be representative of long-term operation. The recalculations would affect BOD, TSS and AOX final limits, but would not affect the TSS and BOD seasonal max of 2.8 and 4.4 million pounds respectively, which are based on a DEQ Water Quality Management Plan and not on the Federal Guidelines.

Mark Sauer
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Outfall 002

Outfall 002 is storm water only and drains the north rail yard area to the Blackwater River. Past Form 2F data indicate no significant levels of pollutants. The outfall is subject to the facility storm water pollution prevention plan requirements, which includes inspection and record keeping requirements. Railcar unloading areas are surrounded by containment curbing to prevent accidental release or contamination of storm water. The discharge of any process wastewater from this outfall is prohibited under part I.A of the permit. Therefore, based on BPJ, no monitoring is being required.

Outfalls 006 and 007

Outfalls 006 and 007 are storm water only and drain mostly unpaved surfaces and railroad bed to Washole Creek. Past Form 2F data indicate no significant levels of pollutants. The outfalls are subject to the facility storm water pollution prevention plan requirements, which includes inspection and record keeping requirements. Railcars were temporarily staged in these areas, but are not unloaded. No railcars are currently stored in the area, but could be in the future. The outfall pipes are provided with a valve that can be closed in the event of a spill to prevent accidental release or contamination of storm water. Due to the new non-operational status of the plant, there are no chemicals stored in these areas, and these outfalls are being reclassified to no longer require chemical monitoring.

Outfalls 008, 009, 011

Outfalls 008, 009 and 011 are storm water only and drain natural vegetated areas outside the facility solid waste landfill. The outfalls are subject to the facility storm water pollution prevention plan requirements, which include inspection and record keeping requirements. Storm water draining from these areas does not come into contact with materials entering the landfill. Pesticides, herbicides, soil conditioners and fertilizers are not applied in these areas. The discharge of any process wastewater from this outfall is prohibited under part I.A of the permit. Therefore, based on BPJ, no monitoring is being required.

Outfalls 012, 013 and 014

Outfalls 012, 013 and 014 drain areas associated with trailer and construction materials storage. The outfalls are subject to the facility storm water pollution prevention plan requirements, which includes inspection and record keeping requirements. The discharge of any process wastewater from these outfalls is prohibited under part I.A of the permit. Therefore, based on BPJ, no monitoring is being required.

OutfallS 010 and 015

Outfalls 010 and 015 consist of uncontaminated, untreated fresh groundwater used for facility water supply resulting from periodic flushing of the water supply line for maintenance purposes. The discharge of any process wastewater or storm water from these outfalls is prohibited under part I.A of the permit. Because the discharge is uncontaminated and the facility keeps detailed records of its supply water quality for process quality control and other purposes, no monitoring is required.

§ 429.166 Pretreatment standards for new sources (PSNS).

Any new source subject to this subpart which introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

Subpart P—Wood Furniture and Fixture Production With Water Wash Spray Booth(s) or With Laundry Facilities Subcategory

§ 429.170 Applicability; description of the wood furniture and fixture production with water wash spray booth(s) or with laundry facilities subcategory.

This subpart applies to discharges to waters of the United States and to the introduction of process wastewater pollutants into publicly owned treatment works from the manufacture of wood furniture and fixtures at establishments that either (a) utilize water wash spray booth(s) to collect and contain the overspray from spray applications of finishing materials, or (b) utilize on-site laundry facilities for fabric utilized in various finishing operations.

§ 429.171 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology (BPT): Settleable solids shall be less than or equal to 0.2 ml/l and pH shall be between 6.0 and 9.0 at all times.

§ 429.172 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT). [Reserved]

§ 429.173 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT): There shall be no discharge of process wastewater pollutants.

§ 429.174 New source performance standards (NSPS).

Any new source subject to this subpart must achieve the following new source performance standards (NSPS): There shall be no discharge of process wastewater pollutants.

§ 429.175 Pretreatment standards for existing sources (PSES).

Any existing source subject to this subpart which introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

§ 429.176 Pretreatment standards for new sources (PSNS).

Any new source subject to this subpart which introduces process wastewater pollutants into a publicly owned treatment works must comply with 40 CFR part 403.

PART 430—THE PULP, PAPER, AND PAPERBOARD POINT SOURCE CATEGORY

GENERAL PROVISIONS

Subpart A—Dissolving Kraft Subcategory

Subpart B—Bleached Papergrade Kraft and Soda Subcategory

Subpart C—Unbleached Kraft Subcategory

Subpart D—Dissolving Sulfite Subcategory

Subpart E—Papergrade Sulfite Subcategory

SUBCATEGORIZATION SCHEME WITH REFERENCES TO FORMER SUBPARTS CONTAINED IN THE JULY 1, 1997 EDITION OF 40 CFR PARTS 425 THROUGH 699—Continued

Final codified subpart	Final subcategorization scheme	Types of products covered in the subpart
G	Mechanical Pulp	Pulp and paper at groundwood chemi-mechanical mills (L[a]); pulp and paper at groundwood mills through the application of the thermo-mechanical process (M[a]); pulp and coarse paper, molded pulp products, and newsprint at groundwood mills (N[a]); and pulp and fine paper at groundwood mills (O[a]).
H	Non-Wood Chemical Pulp	Pulp and paper at non-wood chemical pulp mills.
I	Secondary Fiber Deink	Pulp and paper at deink mills including fine papers, tissue papers, or news print (Q[a]).
J	Secondary Fiber Non-Deink	Paperboard from wastepaper from noncorrugating medium furnish or from corrugating medium furnish (E[a]); tissue paper from wastepaper without deinking at secondary fiber mills (T[a]); molded products from wastepaper without deinking (W[a]); and builders' paper and roofing felt from wastepaper (40 CFR Part 431, Subpart A[a]).
K	Fine and Lightweight Papers from Purchased Pulp.	Fine Papers at nonintegrated mills using wood fiber furnish or cotton fiber furnish (R[a]); and lightweight papers at nonintegrated mills or lightweight electrical papers at nonintegrated mills (X[a]).
L	Tissue, Filter, Non-woven, and Paperboard from Purchased Pulp.	Tissue papers at nonintegrated mills (S[a]); filter and non-woven papers at nonintegrated mills (Y[a]); and paperboard at nonintegrated mills (Z[a]).

[a] This subpart is contained in the 40 CFR parts 425 through 699, edition revised as of July 1, 1997.

§ 430.01 General definitions.

In addition to the definitions set forth in 40 CFR part 401 and 40 CFR 403.3, the following definitions apply to this part:

(a) *Adsorbable organic halides (AOX).* A bulk parameter that measures the total mass of chlorinated organic matter in water and wastewater.

(b) *Annual average.* The mean concentration, mass loading or production-normalized mass loading of a pollutant over a period of 365 consecutive days (or such other period of time determined by the permitting authority to be sufficiently long to encompass expected variability of the concentration, mass loading, or production-normalized mass loading at the relevant point of measurement).

(c) *Bleach plant.* All process equipment used for bleaching beginning with the first application of bleaching agents (e.g., chlorine, chlorine dioxide, ozone, sodium or calcium hypochlorite, or peroxide), each subsequent extraction stage, and each subsequent stage where bleaching agents are applied to the pulp. For mills in subpart E of this part producing specialty grades of pulp, the bleach plant includes process equipment used for the hydrolysis or extraction stages prior to the first application of bleaching agents. Process equipment used for oxygen delignification prior to the application of bleaching agents is not part of the bleach plant.

(d) *Bleach plant effluent.* The total discharge of process wastewaters from the bleach plant from each physical bleach line operated at the mill, comprising separate acid and alkaline filtrates or the combination thereof.

(e) *Chemical oxygen demand (COD).* A bulk parameter that measures the oxygen-consuming capacity of organic and inorganic matter present in water or wastewater. It is expressed as the amount of oxygen consumed from a chemical oxidant in a specific test.

(f) *Elemental chlorine-free (ECF).* Any process for bleaching pulps in the absence of elemental chlorine and hypochlorite that uses exclusively chlorine dioxide as the only chlorine-containing bleaching agent.

(g) *End of the pipe.* The point at which final mill effluent is discharged to waters of the United States or introduced to a POTW.

(h) *Fiber line.* A series of operations employed to convert wood or other fibrous raw material into pulp. If the final product is bleached pulp, the fiber line encompasses pulping, de-knotting, brownstock washing, pulp screening, centrifugal cleaning, and multiple bleaching and washing stages.

(i) *Minimum level (ML).* The level at which the analytical system gives recognizable signals and an acceptable

calibration point. The following minimum levels apply to pollutants in this part:

Pollutant	Method	Minimum level
2,3,7,8-TCDD	1613	10 pg/L[a]
2,3,7,8-TCDF	1613	10 pg/L[a]
Trichlorosyringol	1653	2.5 ug/L[b]
2,3,5-Trichlorocatechol	1653	5.0 ug/L[b]
3,4,5-Trichlorocatechol	1653	5.0 ug/L[b]
3,4,6-Trichlorocatechol	1653	2.5 ug/L[b]
3,4,5-Trichloroguaiacol	1653	2.5 ug/L[b]
3,4,6-Trichloroguaiacol	1653	2.5 ug/L[b]
4,5,6-Trichloroguaiacol	1653	2.5 ug/L[b]
2,4,5-Trichlorophenol	1653	2.5 ug/L[b]
2,4,6-Trichlorophenol	1653	2.5 ug/L[b]
Tetrachlorocatechol	1653	5.0 ug/L[b]
Tetrachloroguaiacol	1653	5.0 ug/L[b]
2,3,4,6-Tetrachlorophenol	1653	2.5 ug/L[b]
Pentachlorophenol	1653	5.0 ug/L[b]
AOX	1650	20 ug/L[b]

[a] Picograms per liter.
[b] Micrograms per liter.

(j) *New source.* (1) Notwithstanding the criteria codified at 40 CFR 122.29(b)(1), a source subject to subpart B or E of this part is a "new source" if it meets the definition of "new source" at 40 CFR 122.2 and:

(i) It is constructed at a site at which no other source is located; or

(ii) It totally replaces the process or production equipment that causes the discharge of pollutants at an existing source, including the total replacement of a fiber line that causes the discharge of pollutants at an existing source, except as provided in paragraph (j)(2) of this section; or

(iii) Its processes are substantially independent of an existing source at the same site. In determining whether these processes are substantially independent, the Director shall consider such factors as the extent to which the new facility is integrated with the existing plant; and the extent to which the new facility is engaged in the same general type of activity as the existing source.

(2) The following are examples of changes made by mills subject to subparts B or E of this part that alone do not cause an existing mill to become a "new source":

(i) Upgrades of existing pulping operations;

(ii) Upgrades or replacement of pulp screening and washing operations;

(iii) Installation of extended cooking and/or oxygen delignification systems or other post-digester, pre-bleaching delignification systems;

(iv) Bleach plant modifications including changes in methods or amounts of chemical applications, new chemical applications, installation of new bleaching towers to facilitate replacement of sodium or calcium hypochlorite, and installation of new pulp washing systems; or

(v) Total replacement of process or production equipment that causes the discharge of pollutants at an existing source (including a replacement fiber line), but only if such replacement is performed for the purpose of achieving limitations that have been included in the discharger's NPDES permit pursuant to § 430.24(b).

(k) *Non-continuous discharger.* Except as provided in paragraph (k)(4) of this section, a non-continuous discharger is a mill which is prohibited by the NPDES authority from discharging pollutants during specific periods of time for reasons other than treatment plant upset control, such periods being at least 24 hours in duration. A mill shall not be deemed a non-continuous discharger unless its permit, in addition to setting forth the prohibition described above, requires compliance with the effluent limitations established for non-continuous dischargers and also requires compliance with maximum day and average of 30 consecutive days effluent limitations. Such maximum day and average of

consecutive days effluent limitations for non-continuous dischargers shall be established by the NPDES authority in the form of concentrations which reflect wastewater treatment levels that are representative of the application of the best practicable control technology currently available, the best conventional pollutant control technology, or new source performance standards in lieu of the maximum day and average of 30 consecutive days effluent limitations for conventional pollutants set forth in each subpart.

(2) A mill is a non-continuous discharger for the purposes of determining applicable effluent limitations under subpart B or E of this part (other than conventional limits for existing sources) if, for reasons other than treatment plant upset control (e.g., protecting receiving water quality), the mill is prohibited by the NPDES authority from discharging pollutants during specific periods of time or if it is required to release its discharge on a variable flow or pollutant loading rate basis.

(l) *POTW.* Publicly owned treatment works as defined at 40 CFR 403.3(o).

(m) *Process wastewater.* For subparts B and E only, process wastewater is any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. For purposes of subparts B and E of this part, process wastewater includes boiler blowdown; wastewaters from water treatment and other utility operations; blowdowns from high rate (e.g., greater than 98 percent) recycled non-contact cooling water systems to the extent they are mixed and co-treated with other process wastewaters; wastewater, including leachates, from landfills owned by pulp and paper mills subject to subpart B or E of this part if the wastewater is commingled with wastewater from the mill's manufacturing or processing facility; and storm waters from the immediate process areas to the extent they are mixed and co-treated with other process wastewaters. For purposes of this part, contaminated groundwaters from on-site or off-site groundwater remediation projects are not process wastewater.

(n) *Production.* (1) For all limitations and standards specified in this part except those pertaining to AOX and chloroform: Production shall be defined as the annual off-the-machine production (including off-the-machine coating where applicable) divided by the number of operating days during that year. Paper and paperboard production shall be measured at the off-the-machine moisture content, except for subpart C of this part (as it pertains to pulp and paperboard production at unbleached kraft mills including linerboard or bag paper and other mixed products, and to pulp and paperboard production using the unbleached kraft neutral sulfite semi-chemical (cross recovery) process), and subparts F and J of this part (as they pertain to paperboard production from wastepaper from noncorrugating medium furnish or from corrugating medium furnish) where paper and paperboard production shall be measured in air-dry-tons (10% moisture content). Market pulp shall be measured in air-dry tons (10% moisture). Production shall be determined for each mill based upon past production practices, present trends, or committed growth.

(2) For AOX and chloroform limitations and standards specified in subparts B and E of this part: Production shall be defined as the annual unbleached pulp production entering the first stage of the bleach plant divided by the number of operating days during that year. Unbleached pulp production shall be measured in air-dried-metric-tons (10% moisture) of brownstock pulp entering the bleach plant at the stage during which chlorine or chlorine-containing compounds are first applied to the pulp. In the case of bleach plants that use totally chlorine free bleaching processes, unbleached pulp production shall be measured in air-dried-metric tons (10% moisture) of brownstock pulp entering the first stage of the bleach plant from which wastewater is discharged. Production shall be determined for each mill based upon past production practices, present trends, or committed growth.

(o) *TCDD.* 2,3,7,8-tetrachlorodibenzo-p-dioxin.

(p) *TCDF.* 2,3,7,8-tetrachlorodibenzofuran.

(q) *Totally chlorine-free (TCF) bleaching.* Pulp bleaching operations that are performed without the use of chlorine, sodium hypochlorite, calcium hypochlorite, chlorine dioxide, chlorine monoxide, or any other chlorine-containing compound.

(r) *Wet Barking.* Wet barking operations shall be defined to include hydraulic barking operations and wet drum barking operations which are those drum barking operations that use substantial quantities of water in either water sprays in the barking drums or in a partial submersion of the drums in a "tub" of water.

[63 FR 18635, Apr. 15, 1998; 63 FR 42239, Aug. 7, 1998]

§ 430.02 Monitoring requirements.

This section establishes minimum monitoring frequencies for certain pollutants. Where no monitoring frequency is specified in this section or where the duration of the minimum monitoring frequency has expired under paragraphs (b) through (e) of this section, the permit writer or pretreatment control authority shall determine the appropriate monitoring frequency in accordance with 40 CFR 122.44(i) or 40 CFR part 403, as applicable.

(a) *BAT, NSPS, PSES, and PSNS monitoring frequency for chlorinated c pollutants.* The following monitoring frequencies apply to discharges subject to subpart B or subpart E of this part:

CAS number	Pollutant	Minimum monitoring frequency	
		Non-TCF[a]	TCF[b]
1198556	Tetrachlorocatechol	Monthly	[c]
2539175	Tetrachloroguaiacol	Monthly	[c]
2539266	Trichlorosyringol	Monthly	[c]
2668248	4,5,6-trichloroguaiacol	Monthly	[c]
32139723	3,4,6-trichlorocatechol	Monthly	[c]
60961207	3,4,5-trichlorocatechol	Monthly	[c]
57057837	3,4,5-trichloroguaiacol	Monthly	[c]
58902	2,3,4,6-tetrachlorophenol	Monthly	[c]
60712449	3,4,6-trichloroguaiacol	Monthly	[c]
87865	Pentachlorophenol[d]	Monthly	[c]
88062	2,4,6-trichlorophenol[d]	Monthly	[c]
95954	2,4,5-trichlorophenol[d]	Monthly	[c]
1746016	2,3,7,8-TCDD	Monthly	[c]
51207319	2,3,7,8-TCDF	Monthly	[c]
67663	chloroform[e]	Weekly	[c]
59473040	AOX[f]	Daily	None specified.

[a] Non-TCF: Pertains to any fiber line that does not use exclusively TCF bleaching processes.
[b] TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in t mit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22 or, for indirect dischargers, as report pretreatment control authority under 40 CFR 403.12 (b), (d), or (e).
[c] This regulation does not specify a limit for this pollutant for TCF bleaching processes.
[d] Monitoring frequency does not apply to this compound when used as a biocide. The permitting or pretreatment control authority must determine the appropriate monitoring frequency for this compound, when used as a biocide, under 40 CFR 122.44(i) or 40 CFR part 403, as applicable.
[e] This regulation does not specify a limit for this pollutant for Subpart E mills.
[f] This regulation does not specify a limit for this pollutant for the ammonium-based or specialty grade sulfite pulp segments of Subpart E.

(b) *Duration of required monitoring for BAT, NSPS, PSES, and PSNS.* The monitoring frequencies specified in paragraph (a) of this section apply for the following time periods:

(1) For direct dischargers, a duration of 5 years commencing on the date the applicable limitations or standards from subpart B or subpart E of this part are first included in the discharger's NPDES permit;

(2) For existing indirect dischargers, until April 17, 2006;

(3) For new indirect dischargers, a duration of 5 years commencing on the date the indirect discharger commences operation.

(c) *Reduced monitoring frequencies for bleach plant pollutants under the Voluntary Advanced Technology Incentives Program.* The following monitoring frequencies apply to mills enrolled in the Voluntary Advanced Technology Incentives Program established under subpart B of this part for a duration of 5 years commencing after achievement

of the applicable BAT limitations specified in § 430.24(b)(3) or NSPS specified in § 430.25(c)(1) for the following pollutants, except as noted in footnote f:

CAS number	Pollutant	Minimum monitoring frequency		
		Non-ECF[a]	Advanced ECF[b,c]	TCF[c]
1198556	Tetrachlorocatechol	Monthly	Monthly	(d)
2539175	Tetrachloroguiacol	Monthly	Monthly	(d)
2539266	Trichlorosyringol	Monthly	Monthly	(d)
2668248	4,5,6-trichloroguaiacol	Monthly	Monthly	(d)
32139723	3,4,6-trichlorocatechol	Monthly	Monthly	(d)
56961207	3,4,5-trichlorocatechol	Monthly	Monthly	(d)
57057837	3,4,5-trichloroguaiacol	Monthly	Monthly	(d)
58902	2,3,4,6-tetrachlorophenol	Monthly	Monthly	(d)
60712449	3,4,6-trichloroguaiacol	Monthly	Monthly	(d)
87865	Pentachlorophenol[e]	Monthly	Monthly	(d)
88062	2,4,6-trichlorophenol[e]	Monthly	Monthly	(d)
95954	2,4,5-trichlorophenol[e]	Monthly	Monthly	(d)
1746016	2,3,7,8-TCDD	Monthly	Monthly	(d)
51207319	2,3,7,8-TCDF	Monthly	Monthly	(d)
67663	Chloroform	Weekly	Monthly	(d)

[a] Non-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.
[b] Advanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes, or exclusively ECF and TCF bleaching processes as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).
[c] TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.
[d] This regulation does not specify a limit for this pollutant for TCF bleaching processes.
[e] Monitoring frequency does not apply to this compound when used as a biocide. The permitting authority must determine the appropriate monitoring frequency for this compound, when used as a biocide, under 40 CFR 122.44(i).
[f] Monitoring requirements for these pollutants by mills certifying as Advanced ECF in their NPDES permit application or other communication to the permitting authority will be suspended after one year of monitoring. The permitting authority must determine the appropriate monitoring frequency for these pollutants beyond that time under 40 CFR 122.44(i).

(d) *Reduced monitoring frequencies for AOX under the Voluntary Advanced Technology Incentives Program (year one).* The following monitoring frequencies apply to direct dischargers enrolled in the Voluntary Advanced Technology Incentives Program established under Subpart B of this part for a duration of one year after achievement of the applicable BAT limitations specified in § 430.24(b)(4)(i) or NSPS specified in § 430.25(c)(2):

CAS number	Pollutant	Non-ECF, any tier[a]	Advanced ECF, any tier[b]	TCF, any tier[c]
59473040	AOX	Daily	Weekly	None specified.

[a] Non-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.
[b] Advanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes or exclusively ECF and TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).
[c] TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

(e) *Reduced monitoring frequencies for AOX under the Voluntary Advanced Technology Incentives Program (years two through five).* The following monitoring frequencies apply to mills enrolled in the Voluntary Advanced Technology Incentives Program established under Subpart B of this part for a duration of four years starting one year after achievement of the applicable BAT limitations specified in § 430.24(b)(4)(i) or NSPS specified in § 430.25(c)(2):

CAS number	Pollutant	Non-ECF any tier[a]	Advanced ECF—tier I[b]	Advanced ECF—tier II[b]	Advanced ECF—tier III[b]	TCF—any tier[c]
59473040	AOX	Daily	Monthly	Quarterly	Annually	None specified.

[a] Non-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.

[b] Advanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes or exclusively ECF and TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).
[c] TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

(f) *Certification in Lieu of Monitoring for Chloroform*—(1) *Under what circumstances may a discharger be exempt from the minimum monitoring requirements of this section for chloroform?* A discharger subject to limitations or standards for chloroform under subpart B of this part is not subject to the minimum monitoring requirements specified in this section for chloroform at a fiber line to which the limitations or standards apply if the discharger meets the requirements of this section.

(2) *How do I qualify for the exemption?* At the time you request an exemption from the minimum monitoring requirements of this section for chloroform from your permitting authority or pretreatment control authority for a fiber line, you must:

(i) Demonstrate, based on 104 measurements taken over a period of not less than two years of monitoring conducted in accordance with paragraph (a) of this section, that you are complying with the applicable limitations or standards for chloroform;

(ii) Certify that you will maintain a record of the maximum value for each of the following process and operating conditions for the fiber line that was recorded during the collection of each of the samples used to make the demonstration required under paragraph (f)(2)(i) of this section.

(A) The pH of the first chlorine dioxide bleaching stage;

(B) The chlorine (Cl_2) content of chlorine dioxide (ClO_2) used on the bleach line;

(C) The kappa factor of the first chlorine dioxide bleaching stage; and

(D) The total bleach line chlorine dioxide application rate;

(iii) Identify the chlorine-containing compound used for bleaching during the collection of samples used to make the demonstration required under paragraph (f)(2)(i) of this section; and

(iv) Certify that the fiber line does not use either elemental chlorine or hypochlorite as bleaching agents.

(3) *What happens if I change the process and operating conditions on the fiber line so that one or more exceeds the maximum value recorded under paragraph (f)(2)(ii) of this section for that process and operating condition?* If you wish to continue your exemption from the minimum monitoring requirements of this section for chloroform, you must:

(i) Demonstrate, based on monitoring conducted at a frequency similar to that required in paragraph (a) of this section and for a duration determined by the permitting or pretreatment control authority, that you are complying with the applicable limitations or standards for chloroform;

(ii) Certify that you will maintain a record of the maximum value for each of the following process and operating conditions for the fiber line that was recorded during the collection of each of the samples used to make the demonstration required under paragraph (f)(6)(i) of this section:

(A) The pH of the first chlorine dioxide bleaching stage;

(B) The chlorine (Cl_2) content of chlorine dioxide (ClO_2) used on the bleach line;

(C) The kappa factor of the first chlorine dioxide bleaching stage; and

(D) The total bleach line chlorine dioxide application rate;

(iii) Identify the chlorine-containing compound used for bleaching during the collection of each sample used to make the demonstration required under paragraph (f)(3)(i) of this section and

(iv) Certify that the fiber line does not use either elemental chlorine or hypochlorite as bleaching agents.

(4) *What are my reporting obligations?* You must certify in reports required under § 122.41(l)(4) or § 403.12(b) of this chapter, as appropriate, that the chlorine-containing compounds used for bleaching are unchanged from those identified under paragraph (f)(2)(iii) of this section and that the following

standards for new sources (PSNS) if it uses chlorophenolic-containing biocides. Permittees not using chlorophenolic-containing biocides must certify to the permit-issuing authority that they are not using these biocides:

SUBPART A
[PSNS]

Pollutant or pollutant property	Maximum for any 1 day	
	Milligrams/liter (mg/l)	Kg/kkg (or pounds per 1,000 lb) of product[a]
Pentachlorophenol	(0.012)(50.7)/y	0.002
Trichlorophenol	(0.069)(50.7)/y	0.019
y = wastewater discharged in kgal per ton of product.		

[a] The following equivalent mass limitations are provided as guidance in cases when POTWs find it necessary to impose mass effluent limitations.

Subpart B—Bleached Papergrade Kraft and Soda Subcategory

§ 430.20 Applicability; description of the bleached papergrade kraft and soda subcategory.

The provisions of this subpart apply to discharges resulting from: The production of market pulp at bleached kraft mills; the integrated production of paperboard, coarse paper, and tissue paper at bleached kraft mills; the integrated production of pulp and fine papers at bleached kraft mills; and the integrated production of pulp and paper at soda mills.

§ 430.21 Specialized definitions.

(a) The general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 and § 430.01 of this part apply to this subpart.

(b) *Baseline BAT limitations or NSPS* means the BAT limitations specified in § 430.24(a) (1) or (2), as applicable, and the NSPS specified in § 430.25(b) (1) or (2), as applicable, that apply to any direct discharger that is not "enrolled" in the "Voluntary Advanced Technology Incentives Program."

(c) *Enroll* means to notify the permitting authority that a mill intends to participate in the "Voluntary Advanced Technology Incentives Program." A mill can enroll by indicating its intention to participate in the program either as part of its application for a National Pollutant Discharge Elimination System (NPDES) permit, or through separate correspondence to the permitting authority as long as the mill signs the correspondence in accordance with 40 CFR 122.22.

(d) *Existing effluent quality* means the level at which the pollutants identified in § 430.24(a)(1) are present in the effluent of a mill "enrolled" in the "Voluntary Advanced Technology Incentives Program."

(e) *Kappa number* is a measure of the lignin content in unbleached pulp, determined after pulping and prior to bleaching.

(f) *Voluntary Advanced Technology Incentives Program* is the program established under § 430.24(b) (for existing direct dischargers) and § 430.25(c) (for new direct dischargers) whereby participating mills agree to accept enforceable effluent limitations and conditions in their NPDES permits that are more stringent than the "baseline BAT limitations or NSPS" that would otherwise apply, in exchange for regulatory- and enforcement-related rewards and incentives.

§ 430.22 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).

(a) Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT):

SUBPART B
[BPT effluent limitations for bleached kraft facilities where market pulp is produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	15.45	8.05	4.52
TSS	30.4	16.4	9.01
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B
[BPT effluent limitations for bleached kraft facilities where paperboard, coarse paper, and tissue paper are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	13.65	7.1	3.99
TSS	24.0	12.9	7.09
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B
[BPT effluent limitations for bleached kraft facilities where pulp and fine papers are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	10.6	5.5	3.[illegible]
TSS	22.15	11.9	6.54
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B
[BPT effluent limitations for soda facilities where pulp and paper are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	13.7	7.1	3.99
TSS	24.5	13.2	7.25
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

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(b) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, resulting from the use of wet barking operations, which may be discharged by a point source subject to the provisions of this subpart. These limitations are in addition to the limitations set forth in paragraph (a) of this section and shall be calculated using the proportion of the mill's total production due to use of logs which are subject to such operations:

SUBPART B

[BPT effluent limitations for bleached kraft facilities where market pulp is produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	2.3	1.2	0.70
TSS	5.3	2.85	1.55
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for bleached kraft facilities where paperboard, coarse paper, and tissue paper are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	2.25	1.2	0.65
TSS	5.75	3.1	1.70
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for bleached kraft facilities where pulp and fine papers are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	1.95	1.0	0.55
TSS	5.3	2.85	1.55
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for soda facilities where pulp and papers are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	2.05	1.1	0.60
TSS	5.25	2.8	1.55
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

(c) The following limitations establish the quantity or quality of pollutants or pollutant parameters, controlled by this section, resulting from the use of log washing or chip washing operations, which may be discharged by a point source subject to the provisions of this subpart. These limitations are in addition to the limitations set forth in paragraph (a) of this section and shall be calculated using the proportion of the mill's total production due to use of logs and/or chips which are subject to such operations:

SUBPART B

[BPT effluent limitations for bleached kraft facilities where market pulp is produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.2	0.1	0.1
TSS	0.6	0.3	0.15
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for bleached kraft facilities where paperboard, coarse paper, and tissue paper are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.25	0.15	0.05
TSS	0.65	0.35	0.20
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for bleached kraft facilities where pulp and fine papers are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.2	0.1	0.05
TSS	0.55	0.3	0.15
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for soda facilities where pulp and papers are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.15	0.1	0.05
TSS	0.5	0.25	0.15
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

(d) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, resulting from the use of log flumes or log ponds, which may be discharged by a point source subject to the provisions of this subpart. These limitations are in addition to the limitations set forth in paragraph (a) of this section and shall be calculated using the proportion of the mill's total production due to use of logs which are subject to such operations:

SUBPART B

[BPT effluent limitations for bleached kraft facilities where market pulp is produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.4	0.2	0.15
TSS	1.15	0.6	0.35
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for bleached kraft facilities where paperboard, coarse paper, and tissue paper are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.45	0.25	0.10
TSS	1.25	0.7	0.35
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for bleached kraft facilities where pulp and fine papers are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.35	0.2	0.10
TSS	1.15	0.6	0.30
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

SUBPART B

[BPT effluent limitations for soda facilities where pulp and papers are produced]

Pollutant or pollutant parameter	Kg/kkg (or pounds per 1,000 lb) of product		
	Continuous dischargers		Non-continuous dischargers (annual average)
	Maximum for any 1 day	Average of daily values for 30 consecutive days	
BOD5	0.3	0.2	0.
TSS	1.1	0.55	0.3
pH	(1)	(1)	(1)

[1] Within the range of 5.0 to 9.0 at all times.

§ 430.23 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT). The limitations shall be the same as those specified in § 430.22 of this subpart for the best practicable control technology currently available (BPT).

§ 430.24 Effluent limitations representing the degree of effluent reduction attainable by the application of best available technology economically achievable (BAT).

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must

TABLE 4C

INDUSTRIAL WASTEWATER DISCHARGERS TO BLACKWATER RIVER SUB-BASIN

INDUSTRIAL DISCHARGERS				PRESENT L[illegible]		
DISCHARGER	RECEIVING STREAM	TREATMENT	ACTUAL FLOW (MGD)	AVERAGE BOD_5	MAXIMUM BOD_5	AVERAGE TSS
[illegible]nion Camp Bleach Paper (001)	Blackwater River	Clarification, Aeration and Holding Ponds	14×10^9 gal/yr		4.4×10^6 #/Yr	2.88×10^6 #/Yr
[illegible]ion Camp Building Products (001)	Blackwater River	None	.115	No Limits		
[illegible]. Regis Paper Company [illegible]	Trib. to Blackwater River	None	.05	No Limits		
Union Camp Bleach Paper (002)	Blackwater River	None	.72	No Limits		
Masonite Corporation #1	Spring Branch	Settling Box	.002	1.2 #/D	2.4 #/D	.95 #/D
Masonite Corporation #2	Spring Branch	None	.002	1.7 #/D	3.4 #/D	2.1 #/D
DESCO to Steven Kent	Woody's Pond	None	N/A*	N/A	N/A	N/A
Spurlock (001)	Spring Branch	Holding Pond w/ Aeration	Periodic Discharge			
Spurlock (002)	Spring Branch	Cooling Water Discharge	.197			

ATTACHMENT 7

SPECIAL CONDITIONS RATIONALE

VPDES PERMIT PROGRAM

LIST OF SPECIAL CONDITIONS RATIONALE

Name of Condition:

B. Other Requirements or special Conditions

1. Nutrient Enriched Waters Reopener

Rationale: The Policy for Nutrient Enriched Waters, 9 VAC 25-40 -10 allows reopening of permits for discharges into waters designated as nutrient enriched if total phosphorus and total nitrogen in a discharge potentially exceed specified concentrations. The policy also anticipates that future total phosphorus and total nitrogen limits may be needed.

2. Total Maximum Daily Load (TMDL) Reopener

Rationale: For specified waters, section 303(d) of the Clean Water Act requires the development of total maximum daily loads necessary to achieve the applicable water quality standards. The TMDL must take into account seasonal variations and a margin of safety. In addition, section 62.1-44.19:7 of the State Water Control Law requires the development and implementation of plans to address impaired waters, including TMDLs. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to incorporate the requirements of a TMDL once it is developed. In addition, the reopener recognizes that, in according to section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other wasteload allocation prepared under section 303 of the Act.

3. Licensed Operator Requirement

Rationale: The Permit Regulation, 9 VAC 25-31-200 D and Code of Virginia 54.1-2300 et. seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators.

4. Operations & Maintenance (O & M) Manual

Rationale: The State Water Control Law, Section 62.1-44.21 allows requests for any information necessary to determine the effect of the discharge on state waters. Section 401 of the Clean Water Act requires the permittee to provide opportunity for the state to review the proposed operations of the facility. In addition, 40 CFR 122.41 (e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) in order to achieve compliance with the permit (includes laboratory controls and QA/QC).

5. Notification Levels

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-200 and 40 CFR 122.42 (a) require notification of the discharge of certain parameters at or above specific concentrations for existing manufacturing, commercial mining and silvicultural discharges.

6. Quantification Levels Under Part I.A.

Rationale: States are authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR part 130, Water Quality Planning and Management, subpart 130.4.

7. Compliance Reporting Under Part I.A.

Rationale: Defines reporting requirements for toxic parameters with quantification levels and other limited parameters to ensure consistent, accurate reporting on submitted reports.

8. Materials Handling and Storage

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-50 A., prohibits the discharge of any wastes into State waters unless authorized by permit. The State Water Control Law, Sec. 62.1-44.18:2, authorizes the Board to prohibit any waste discharge which would threaten public health or safety, interfere with or be incompatible with treatment works or water use. Section 301 of the Clean Water Act prohibits the discharge of any pollutant unless it complies with specific sections of the Act.

9. Effluent Monitoring Frequencies

Rationale: The incentive for reduced monitoring is an effort to reduce the cost of environmental compliance and to provide incentives to facilities which demonstrate outstanding performance and consistent compliance with their permits. Facilities which cannot comply with specific effluent parameters or have other related violations will not be eligible for this benefit. This is in conformance with Guidance Memorandum No. 98-2005 - Reduced Monitoring and EPA's proposed "Interim Guidance For Performance-Based Reduction of NPDES Permit Monitoring Frequencies" (EPA 833-B-96-001) published in April 1996.

10. Ground Water Monitoring Plan

Rationale: Ground water monitoring will indicate whether the system integrity is being maintained and will determine if activities at the site are resulting in violations of the SWCB's Groundwater Standards.

11. Sampling Methodology for Outfall 001

Rationale: Defines methodology for collecting representative effluent samples in conformance with applicable regulations.

12. Use of Trichlorophenol or Pentachlorophenol as Biocides

Rationale: Federal regulations at 40 CFR 430 Subparts B and I require certification by facilities not using certain biocides.

13. Discharge Flow Management for Outfall 001

Rationale: The VPDES Permit Regulation at 9 VAC 25-31-220 K. and federal regulations at 40 CFR 122.44(k) allow BMPs for the control of toxic pollutants listed in Section 307(a)(1) and hazardous substances listed in Section 311 of the Clean Water Act where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law. Actual daily Instream Waste Concentration (IWC) is being limited to a maximum of 65% to ensure that actual

IWC is significantly less than the 75% utilized in the Toxics Management Program for toxicity testing purposes.

Rationale and Discussion for Out-Of-Season Discharges:

The permittee submitted a permit modification request in May 2008. The permit modification request came after numerous discussions between the permittee and DEQ concerning allowing IP to discharge some wastewater outside the permitted season of November to March. IP was concerned that in recent years low river flows, low in-stream dissolved oxygen levels and/or high water temperatures have made it difficult for IP to begin their discharge season early enough to allow the release of the entire contents of "C" pond, which they need to empty prior to March 31 in order to be able to accommodate all of the wastewater generated during the times of year they do not discharge. They have had to request out-of-season discharges in past years. There were no regulatory criteria for requesting, approving, monitoring or documenting such discharges. Through subsequent discussions it was decided to best include these types of discharges in the VPDES permit if IP felt the need to request these in the future. Specific language has been developed to address these discharges. Specific rationale for the language follows.

16.a. This language has not changed from the previous permits except to note that out-of-season discharges will be authorized in Part I.B.16.c.

16.b. This language has changed only in that this section now specifically applies to routine seasonal discharges from November to March.

16.c. and 16.d. This language specifically addresses out-of-season discharges. Out-of -season discharges will be considered for approval in September and October. If the permittee submits acceptable and approvable toxicity test results using early life-stage herring, out-of-season discharges will be considered in all months except April and May. April and May discharges will not be approved due to two main factors. The first is that the wildlife and fisheries staffs from North Carolina, Virginia and the US Fish and Wildlife Service have expressed concern over spring time discharges that could potentially affect shad and herring spawning and migration. Correspondence from these agencies is presented in Attachment 14. Secondly, IP has indicated that the intent of these out-of-season discharges was to coincide with storm events that provide for higher river flows than typical for the season. These types of storm events are more frequent in later summer and fall months rather than the short-duration, localized heavy rainfalls associated with spring thunderstorm events. The benefit from allowing short-duration discharges in these months does not outweigh the need to protect indigenous fish populations in these months, including populations that may linger in the Blackwater River past the typical migration time frame. Discharges in other months will be considered for approval by the DEQ Regional office on a case-by-case basis. All out-of-season discharges must be approved before an out-of-season discharge can take place. Out-of-season discharges based on the results of toxicity testing in June, July and August will be limited to the IWC identified in the toxicity tests as the NOEC.

16.c.1. provides the requirements for requesting out-of-season discharges. This will standardize the request process and provide the DEQ the information considered necessary to approve such a request.

16.c.1.a. addresses the discharge rate and management thereof to protect against toxicity to aquatic organisms and be protective against biological impacts in the receiving stream. This is similar to the existing requirement for permitted discharge season discharges presented in 16.b. of the current permit. The IWC will be limited to 45% during each discharge day for out-of-season discharges. This is based on two factors. The first is that the DEQ does not want the receiving stream to be effluent-dominated during times of high water

temperatures, low dissolved oxygen levels and potential impacts from storm events. Secondly, IWC data submitted with toxicity test results from 2003 to the present indicate that the permittee has had IWC levels from 2% to 38%, with no IWC greater than 38% for in-season discharges. It is not prudent nor protective of the receiving stream to allow higher IWC concentrations during times of out-of-season discharges than the permittee has maintained during typical permitted discharges during times of the least critical river condtions. The permittee has demonstrated passing toxicity test results consistently when IWC's were less than 45%, so toxicity testing will not be required during out-of-season discharges as long as the IWC is less than 45%. Data are presented below.

International Paper VA0004162: Instream Waste Concentrations (IWC) for Chronic Toxicity Samples Collected 2003-2008

Date of Chronic Toxicity Sample	IWC Range for the 3 Chronic Samples	NOEC Survival	NOEC Reproduction
2/11/2008	7-9%	100%	100%
1/28/2008	31-33%	100%	100%
1/7/2008	29-38%	100%	100%
2/19/2007	6-9%	100%	75% ENSR
		100%	56% CBI
1/22/2007	13-16%	100%	100%
2/22/2006	12%	100%	75%
1/16/2006	18-20%	100%	100%
2/24/2005	12% 15% Max for the Season	100%	100%
2003-2004 Season	24% Max for the Season		
2/17/2004	4%	100%	75% ENSR
			100% CBI
2/24/2003	2-3%	100%	42%

16.c.1.b. addresses in-stream dissolved oxygen (D.O.) levels and monitoring of instream D.O. levels prior to an out-of-season discharge. This section also addresses review of the D.O. data and management of the discharge rate so that D.O. levels are maintained at ambient in-stream levels, with no impact to in-stream D.O. levels attributable to the out-of-season discharge. The permittee will need to provide D.O. data and proposed discharge management practices to ensure D.O. levels are not impacted by the discharge.

16.c.2. addresses the duration of discharge. The permittee will be allowed to discharge during times of increased river flow and must cease discharging before river flows return to historical averages. This will ensure that the discharge is associated only with increased flows as indicated in the permittee's modification request, and therefore protects the receiving stream from impacts associated with a discharge during critical river conditions.

16.c.3. addresses monitoring requirements during out-of-season discharges. The permittee must monitor at least once per discharge for each out-of-season discharge. If a discharge event lasts longer than 7 calendar days, the permittee must monitor in accordance with Part I.A. of the permit. Effluent limitations listed in Part I.A. will be in effect during out-of-season discharges. This requirement ensures compliance with the permit, the State permit regulation and 40 CFR for discharges from pulp and paper mills. The permittee will be required to submit a discharge monitoring report (DMR) providing the results of effluent sampling. 2,3,7,8-TCDD and 2,3,7,8-TCDF are

not subject to discharge-event limitations, these parameters are only subject to seasonal limitations, and are subject to 1/season monitoring, required in the last 14 days of the discharge season. Therefore, monitoring for these parameters will not apply to out-of-season discharges.

16.c.4. addresses documentation and evidence to show that the out-of-season discharge(s) caused no environmental impacts in the receiving stream. This is in accordance with the general Water Quality Standard that prohibits a discharge to alter the receiving stream.

14. In-Stream D.O. Monitoring during in-season discharges

Rationale: The Virginia Water Quality Standards at 9 VAC 25-260-50 establish minimum dissolved oxygen criteria that must be maintained. The VPDES regulations at 9 VAC 25-31-210 and -220 authorize the establishment of conditions and limitations necessary to assure compliance with applicable requirements and water quality standards.

This condition applies to discharges during the discharge season of November to March. This is to separate this requirement from the monitoring and discharge management requirements in condition 16.c. that addresses out-of-season discharges. The condition requires the permittee to regulate the discharge so that all D.O. standards downstream of the discharge shall be maintained. The discharge from this facility has little impact upstream of the discharge.

15. Sampling Methodology for Outfall 103

Rationale: Defines methodology for collecting representative effluent samples in conformance with applicable regulations.

16. Measurement and Reporting of Kappa Number for Outfall 103

Rationale: Kappa Number is a method-defined analyte regulated under 40 CFR .430 for bleach lines enrolled in the Voluntary Advanced Technology Incentives Program. The methodology for measuring and reporting Kappa Number in conformance with applicable regulations must be defined.

17. Filtrate Recycling and Certification

Rationale: 40 CFR .430.24(b) requires that pulping process filtrates be recycled for bleach lines enrolled in the Voluntary Advanced Technology Incentives Program.

18. New Discharge Characterization for Outfall 001

Rationale: The permit limitations are based on assumed effluent quality characteristics when application Form 2E is used or when new processes are proposed and addressed by a permit modification. These assumptions (and the permit basis) can only be validated with actual effluent data. The submission of actual data is required in the application form instructions. The characterization will be required with the application for reissuance.

19. Form 2F Sampling

Rationale: The permit limitations are based on assumed effluent quality characteristics (no data submitted with application as required). These assumptions (and the permit basis) can only be validated with actual effluent

data. The submission of actual data is required in the application form instructions. In this case, Outfall 009 needs to be characterized as a result of spills from the landfill area to the storm water outfall. Characterization will indicate whether or not landfill leachate has impacted this outfall. The characterization will be required with the application for reissuance.

C. Best Management Practices (BMPs) for Spent Pulping Liquor, Soap and Turpentine Management, Spill Prevention, and Control

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-220 K., and 40 CFR 122.44(k) allow BMPs for the control of toxic pollutants listed in Section 307(a)(1), and hazardous substances listed in Section 311 of the Clean Water Act where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law. In addition federal categorical effluent guidelines at 40 CFR 430.03 prescribe certain best management practices applicable to this facility. The facility has been implementing the conditions required in the BMPs over the previous permit term, and all items are currently completed or are ongoing. Changes in operations, processes and/or controls may necessitate updating the BMPs at the facility in the future.

D. TOXICS MANAGENENT PROGRAM (TMP)

Rationale: To determine the need for pollutant specific and/or whole effluent toxicity limits as may be required by the VPDES Permit Regulation, 9 VAC 25-31-220 D. and 40 CFR 122.44 (d). See Attachment 9 of this fact sheet for additional justification.

E. STORM WATER MANAGEMENT CONDITIONS

1. Recording of Results

Rationale: This sets forth the information which must be recorded and reported for each storm event sampling (ie. date and duration event, rainfall measurement, and duration between qualifying events). It also requires the maintenance of daily rainfall logs which are to be reported. This condition is carried over from the previous storm water pollution prevention plan requirements contained in the EPA storm water baseline industrial general permit.

2. Sampling Waiver

Rationale: This condition allows the permittee to collect substitute samples of qualifying storm events in the event of adverse climatic conditions. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

3. Representative Discharge

Rationale: This condition allows the permittee to submit the results of sampling from one outfall as representative of other similar outfalls, provided the permittee can demonstrate that the outfalls are substantially identical. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

4. Quarterly Visual Examination of Storm Water Quality

Rationale: This condition requires that visual examinations of storm water outfalls take place at a specified frequency and sets forth what information needs to be checked and documented. These examinations assist with the evaluation of the pollution prevention plan by providing a simple, low cost means of assessing the quality of storm water discharge with immediate feedback. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

5. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

Rationale: This condition requires that the discharge of hazardous substances or oil from a facility be eliminated or minimized in accordance with the facility's storm water pollution prevention plan. If there is a discharge of a material in excess of a reportable quantity, it establishes the reporting requirements in accordance with state laws and federal regulations. In addition, the pollution prevention plan for the facility must be reviewed and revised as necessary to prevent a reoccurrence of the spill. Use of this condition is a BPJ determination based on the EPA storm water multi-sector general permit for industrial activities and is consistent with that permit.

6. Allowable Non-Storm Water Discharges

Rationale: The listed allowable non-storm water discharges are the same as those allowed by the EPA in their multi-sector general permit, and are the same non-storm water discharges allowed under the Virginia General VPDES Permit for Discharges of Storm Water Associated with Industrial Activity, 9 VAC 25-151-10 et seq. Allowing the same non-storm water discharges in VPDES individual permits provides consistency with other storm water permits for industrial facilities. The non-storm water discharges must meet the conditions in the permit.

7. Storm Water Pollution Prevention Plan

Rationale: The Clean Water Act 402(p) (2) (B) requires permits for storm water discharges associated with industrial activity. VPDES permits for storm water discharges must establish BAT/BCT requirements in accordance with 402(p)(3) of the Act. The Storm Water Pollution Prevention Plan is the vehicle proposed by EPA in the final NPDES General Permits for Storm Water Discharges Associated with Industrial Activity (Federal Register Sept 9, 1992) to meet the requirements of the Act. Additionally, the VPDES Permit Regulation, 9 VAC 25-31-220 K., and 40 CFR 122.44 (k) allow BMPs for the control of toxic pollutants listed in Section 307 (a)(1), and hazardous substances listed in Section 311 of the Clean Water Act where numeric limits are infeasible or BMPs are needed to accomplish the purpose/intent of the law.

ATTACHMENT 8

TOXICS MONITORING/TOXICS REDUCTION/ WET LIMIT RATIONALE

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard Virginia Beach, VA 23462

SUBJECT: TMP language for International Paper-Franklin (VA0004162)

TO: Deanna Austin

FROM: Mark Sauer

DATE: August 26, 2010

COPIES: TRO File (PPP #617)

International Paper-Franklin (IP) is a paper mill located in Franklin, VA. IP had operated the facility as a paper mill until its closure in April 2010. Although there is no production, the facility would like to keep their permit active. Future operations at the mill are unknown at this time but there are numerous repurposing proposals that could be done. Because of this, the permit will remain active with all existing discharge points. The facility will have post closure discharges related to cleanup and process wastewater from C pond from the operating year prior to plant closure. Outfall 001 discharges to the Blackwater River. Data collected during the 2006-2010 permit term are shown in the table below.

DESCRIPT	SPECIES	SAMPLEDT	LC50	SURVIVAL	NOEC	TU	TEST_COM	LAB
1st Set of 2 Chronic Tests	C.d.	1/16/06			100	1	Repro 100%	CBI
1st Set of 2 Acute Tests	C.d.	1/18/06	100	100		1		ENSR
1st Set of 2 Chronic Tests	C.d.	2/20/06		100	75	1.33	Repro 75% Split sample with ENSR	CBI
1st Set of 2 Chronic Tests-Split Sample	C.d.	2/20/06		100	100	1	Split sample with CBI	ENSR
1st Set of 2 Acute Tests	C.d.	2/22/06	100	95		1	Split sample with ENSR	CBI
1st Set of 2 Acute Tests-Split Sample	C.d.	2/22/06	100	100		1	Split sample with CBI	ENSR
2nd Set of 2 Chronic Tests	C.d.	1/22/07		100	100	1	Repro 100% Split sample with ENSR	CBI
2nd Set of 2 Acute Tests	C.d.	1/24/07	100	100		1	Split sample with ENSR	CBI
2nd Set of 2 Chronic Tests	C.d.	2/19/07		100	56	1.79	NOEC 75% for the ENSR data Tuc 1.33	CBI
2nd Set of 2 Acute Tests	C.d.	2/21/07	100	100		1	Split sample with ENSR	CBI
3rd Set of 2 Chronic Tests	C.d.	1/7/08		100	100	1	Pre Release Tox	CBI
3rd Set of 2 Acute Tests	C.d.	1/9/08	100	100		1	Pre Release Tox	CBI
3rd Set of 2 Chronic Tests	C.d.	1/28/08		100	100	1		CBI
3rd Set of 2 AcuteTests	C.d.	2/1/08	100	100		1		CBI
3rd Set of 2 Chronic Tests	C.d.	2/11/08		100	100	1		CBI
3rd Set of 2 Acute Tests	C.d.	2/13/08	100	100		1		CBI
4th Set of 2 Acute Tests	C.d.	1/7/09	100	100		1		CBI
4th Set of 2 Chronic Tests	C.d.	1/7/09		100	100	1		CBI
4th Set of 2 Acute Tests	C.d.	2/18/09	100	100		1		CBI

4th Set of 2 Chronic Tests	C.d.	2/18/09		100	100	1		CBI
5th Set of 2 Chronic Tests	C.d.	1/4/10		100	100	1		CBI
5th Set of 2 Acute Tests	C.d.	1/6/10	100	100		1		CBI
5th Set of 2 Acute Tests	C.d.	2/15/10	100	100		1		CBI
5th Set of 2 Chronic Tests	C.d.	2/15/10		100	100	1		CBI

The following language is recommended for the International Paper-Franklin permit.

D. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring - Outfall 001

a. The permittee shall conduct two acute and two chronic toxicity tests each discharge season. The acute test samples shall be collected using a grab sample of final effluent from outfall 001. The chronic test samples shall be collected using at least three grab samples of final effluent from outfall 001 during the chronic test. The second acute test shall be conducted during the second chronic test. The last grab sample for the second chronic test shall be collected within 14 days of the end of the discharge season. The acute tests shall be 48-hour static tests using Ceriodaphnia dubia, conducted in such a manner and at sufficient dilutions for calculation of a valid LC_{50}. The chronic tests shall be static renewal tests using Ceriodaphnia dubia. The C. dubia test shall be a 3-brood survival and reproduction test. These chronic tests shall be conducted in such a manner and at sufficient dilutions to determine the NOEC for survival and reproduction. **The results of all analyses shall be reported. Test results for each test shall be submitted by the 10th of the month after the month the test results were received.**

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3

b. The permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of the effluent toxicity. Test procedures and reporting shall be in accordance with 1.a above.

c. The following criteria shall be used in evaluating the toxicity test data generated in 1.a above:

(1) Acute LC_{50} greater than or equal to 100% effluent;

(2) Chronic NOEC greater than or equal to the IWC of 75%

d. If, in the testing according to I.D.1, any toxicity tests are invalidated, the tests shall be repeated within the testing period that the original test was taken, or if already past that period, within fourteen (14) days of notification. If there is no discharge during this period, a sample must be taken during the first allowable discharge.

e. All applicable data will be evaluated for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed, a WET limit and compliance schedule will be required and the toxicity tests of D.1.a. may be discontinued.

2. Reporting Schedule

Each toxicity test report submitted in accordance with this Toxics Management Program shall identify the specific period represented. The permittee shall report the results and supply **one** complete copy of the toxicity test reports to the Tidewater Regional Office in accordance with the schedule below. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, and all chains of custody.

(a)	Conduct first set of two acute and two chronic biological tests	By March 31, 2011
(b)	Submit results of all biological tests	By the 10th of the month following the month in which test results were received but no later than May 10, 2011
(c)	Conduct second set of two acute and two chronic biological tests	By March 31, 2012
(d)	Submit results of all biological tests	By the 10th of the month following the month in which test results were received but no later than May 10, 2012
(e)	Conduct third set of two acute and two chronic biological tests	By March 31, 2013
(f)	Submit results of all biological tests	By the 10th of the month following the month in which test results were received but no later than May 10, 2013
(g)	Conduct fourth set of two acute and two chronic biological tests	By March 31, 2014
(h)	Submit results of all biological tests	By the 10th of the month following the month in which test results were received but no later than May 10, 2014
(i)	Conduct fifth set of two acute and two chronic biological tests	By March 31, 2015
(j)	Submit results of all biological tests	By the 10th of the month following the month in which test results were received but no later than May 10, 2015

ATTACHMENT 9

RECEIVING WATERS INFO./ TIER DETERMINATION/STORET DATA/ STREAM MODELING/303(d) LISTED SEGMENTS

Planning Permit Review

Date: 2/23/2012

To: Kristie Britt, TRO

Permit Writer: **M. Sauer**

Facility: **International Paper – Franklin Mill**

Permit Number: **VA0004162**

Issuance, Reissuance or Modification (if Modification describe): **Modification**

Permit Expiration Date: **11/15/2015**

Waterbody ID (ex: VAT-G15E): **VAT-K36R**

Topo Name: **Riverdale 05C**

Facility Address:

34040 Union Camp Drive, Franklin, VA 23851 – note – facility address is approx. 7 miles from the actual discharge location. Lat Long of discharge location is 36 34 08 76 53 09.

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: Blackwater River	
Stream Data Requested? No	
Outfall #: 001	**Lat Lon: 36 34 08 76 53 09**
Outfall #:	**Lat Lon:**
Outfall #:	**Lat Lon:**
Stream Name (2):	
Stream Data Requested?	
Outfall #:	**Lat Lon:**
Outfall #:	**Lat Lon:**
Outfall #:	**Lat Lon:**

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

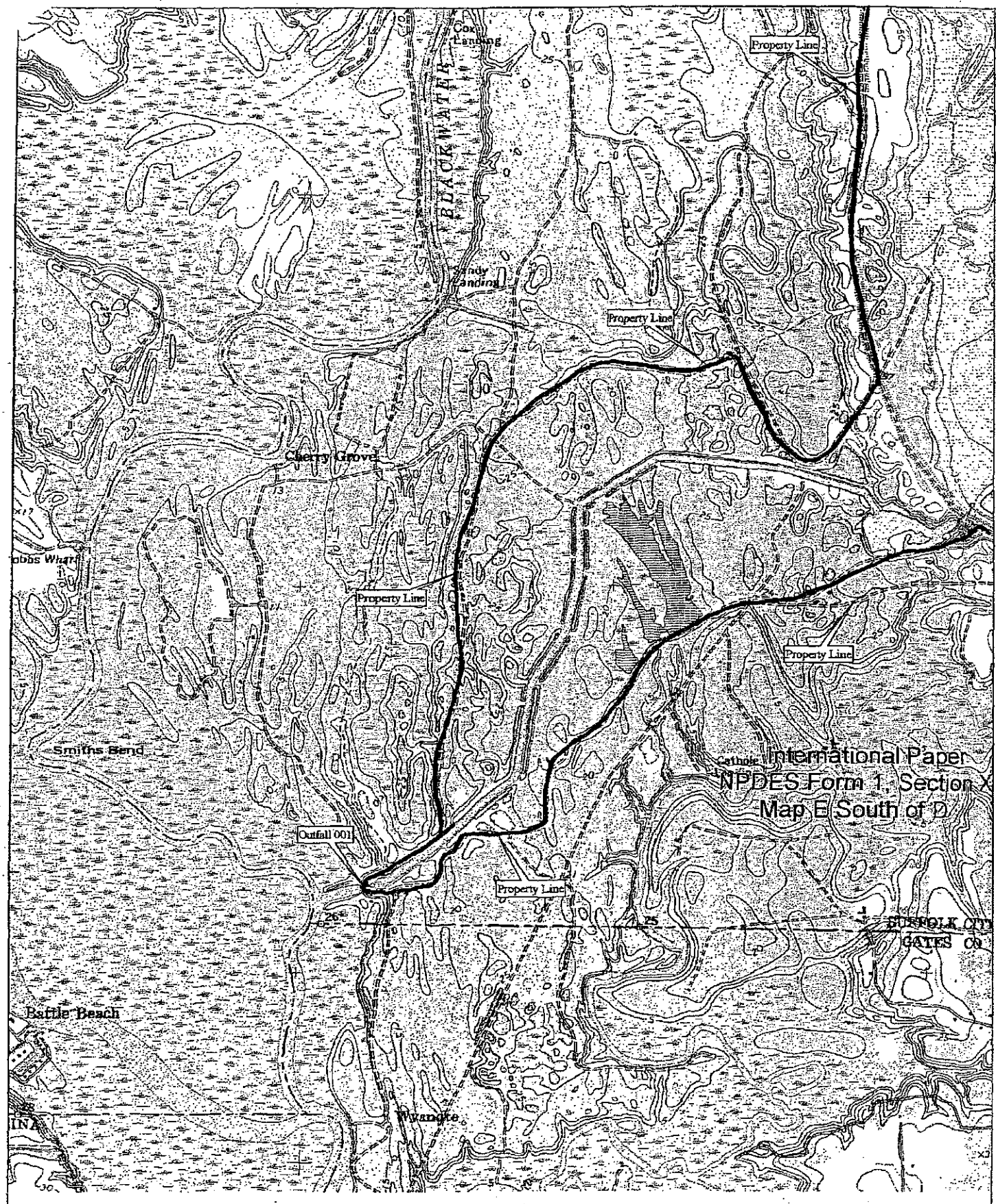
Planning Review:

303 (d): Indicate Outfalls which discharge directly to an impaired (Category 5) stream segment and parameters impaired	
Outfall 001 discharges on property at wastewater treatment unit then to impaired segment VAT-K36R_BLW05A08. Impairments include DO (natural conditions) and mercury. See Attachment 1 for list and description of impaired parameters.	
Tier Determination	
Tier	The Blackwater River is a Tier 1 water based on biological data collected at Station 5ABLW001.10. See Attachment 2.
Tier	
Management Plan	
Is the facility Referenced in a Management Plan?	No
Are limits contained in a Management Plan?	No

Review will be completed in 30 days of receipt of request.

Additional Comments:

The Blackwater River is proposed for the next Triennial Review to be changed to a Class VII water. KNB 3/5/2012



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 950 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

2010 Impaired Waters - 303(d) List

Category 5 - Waters needing Total Maximum Daily Load Study

Chowan River and Dismal Swamp Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
K31R-01-BAC	Blackwater Swamp, Warwick Swamp						
Recreation	Escherichia coli	5A			22.71	2006	2014
	Escherichia coli	5A			13.20	2008	2014
K31R-02-BAC	Second Swamp						
Recreation	Escherichia coli	5A			9.55	2010	2016
K31R-04-BAC	Warwick Swamp						
Recreation	Escherichia coli	5A			2.93	2010	2022
K31R-04-BEN	Warwick Swamp						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			2.93	2010	2022
K31R-05-BAC	North Fork Blackwater Swamp						
Recreation	Escherichia coli	5A			5.78	2010	2022
K32R-01-BAC	Blackwater River						
Recreation	Escherichia coli	5A			24.01	2006	2010
	Escherichia coli	5A			1.03	2008	2010
K32R-01-BEN	Blackwater River - Lower						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			1.03	2008	2020
K32R-04-BAC	Otterdam Swamp						
Recreation	Escherichia coli	5A			5.88	2006	2014
K32R-05-BAC	Coppahaunk Swamp, UT - XDT						
Recreation	Escherichia coli	5A			0.91	2006	2014
K32R-11-BAC	XDR - UT to Otterdam Swamp						
Recreation	Escherichia coli	5A			2.61	2010	2018
K32R-13-HG	Blackwater River Basin						
Fish Consumption	Mercury in Fish Tissue	5A			37.53	2004	2016
	Mercury in Fish Tissue	5A			25.38	2006	2018
	Mercury in Fish Tissue	5A			528.80	2008	2018
	Mercury in Fish Tissue	5A			282.28	2008	2020
	Mercury in Fish Tissue	5A			1.58	2010	2020
	Mercury in Fish Tissue	5A			214.74	2010	2022
K32R-15-BAC	Spring Branch, UT (XAW)						
Recreation	Escherichia coli	5A			1.07	2010	2022
K32R-18-BEN	Blackwater River, UT						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			3.13	2008	2020
K33R-02-BAC	Blackwater River - Upper						
Recreation	Escherichia coli	5A			18.94	2008	2020
K33R-02-BEN	Blackwater River - Upper						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			18.94	2008	2020
K33R-03-BEN	Blackwater River - Lower						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			4.14	2008	2020

Attachment 1-1

2010 List of Naturally Impaired Waters (Category 4C)*
No TMDL Needed

Chowan River and Dismal Swamp Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
K36R-01-DO	Blackwater River - Lower				
Aquatic Life	Oxygen, Dissolved	4C			10.21
K36R-03-DO	Washole Creek				
Aquatic Life	Oxygen, Dissolved	4C			0.64
K37R-01-DO	Buckhorn Creek				
Aquatic Life	Oxygen, Dissolved	4C			1.55
K37R-01-PH	Buckhorn Creek				
Aquatic Life	pH	4C			1.55
K38R-01-DO	Somerton Creek				
Aquatic Life	Oxygen, Dissolved	4C			9.09
K39R-01-DO	Dismal Swamp Canal & Feeder Ditch to Lake Drummond				
Aquatic Life	Oxygen, Dissolved	4C			17.58

* Multiple listings are due to the same impairments for different uses and/or different initial listing dates for adjacent waters.

Attachment 1-2

Appendix A - List of Impaired (Category 5) Waters in 2010

Chowan River and Dismal Swamp Basins

Cause Group Code: **K32R-13-HG** **Blackwater River Basin**

Location: Blackwater River and tributaries from its headwaters to the VA-State Line

City / County: Dinwiddie Co. Isle Of Wight Co. Petersburg City Prince George Co. South Boston City
Southampton Co. Suffolk City Surry Co. Sussex Co.

Use(s): Fish Consumption

Cause(s) / VA Category: Mercury in Fish Tissue / 5A

During the 2006 cycle, the Blackwater River from Route 31 near Dendron downstream to the Virginia-North Carolina state line was assessed as impaired of the Fish Consumption Use due to a VDH fish consumption advisory for mercury.

During the 2008 cycle, the advisory was expanded to include the Blackwater River to its headwaters, including all of its tributaries. The advisory currently recommends consuming no more than two meals/month of largemouth bass, sunfish species, bowfin, chain pickerel, white catfish, redhorse sucker and longnose gar.

The advisory is based on the results of DEQ's fish tissue monitoring program, which show mercury exceedances at multiple stations throughout the watershed.

Blackwater River Basin **Fish Consumption**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Mercury in Fish Tissue - Total Impaired Size by Water Type:			**1,090.31**

Sources:

Atmospheric Deposition - Toxics — Source Unknown

VIRGINIA

305(b)/303(d)

WATER QUALITY INTEGRATED REPORT

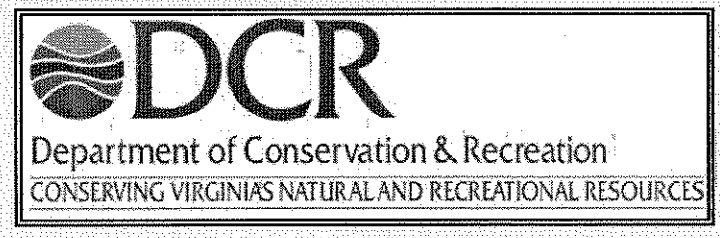
to

CONGRESS and the EPA ADMINISTRATOR

for the

PERIOD

January 1, 2003 to December 31, 2008



Richmond, Virginia

November 2010

Attachment 1-4

Virginia Department of Environmental Quality
Biological Monitoring Program
305(b) Assessment Fact Sheet

Regional Office: TRO
Review Date: 6/21/11
Stream Name and Site Location: Blackwater River (Control), Southampton County
Station ID #: 5ABLW001.10
Assessment Method: MACS

Biological Assessments for the Last Five Years

Year	spring score	spring assessment	fall score	fall assessment
2005			8	Moderately Impaired
2006			14	Moderately Impaired
2007				
2008	13	Moderately Impaired	12	Moderately Impaired
2009				
2010				
seasonal avg 6-yrs	13.0		11.33	
seasonal avg last 2-yrs	13.0		13.0	
final 6-yr average	12.17		11.75	
final 2-yr average	13.0		0.0	

Note, because of the long six year time frame covered by this review and for a variety of reasons, some sites may not have been sampled during every year or season and/or an assessment ranking or score may not be available for every "cell" in the above table. The above table is intended to be a convenient method to be used to summarize and review all the data available for the period of concern. The final assessment ranking for each site should be based on a review of all the available rankings shown in the above table and any pertinent supplemental data described below. For the purpose of 305(b) report preparation, if more recent bioassessment rankings differ significantly from earlier rankings, primary consideration should be given to the more recent assessment data. This is described in more detail of section 9.3 of the 305(b) guidelines.

Supplemental Information (if applicable): CPMI not calibrated for swamps and large rivers, so stream is possibly only slightly impaired.

Final Assessment Rating: Slightly to moderately impaired

Biological data demonstrates in stream toxicity based on CPMI scores <16

Attachment 2-1

TMDL Permit Review

Date: 2/23/2012

To: Jennifer Howell, TRO √ JSH 3/9/2012

Permit Writer: M. Sauer

Facility: International Paper – Franklin Mill

Permit Number: VA0004162

Issuance, Reissuance or Modification (if Modification describe) : Modification

Permit Expiration Date: 11/15/2015

Waterbody ID (ex: VAT-G15E): VAT-K36R

Topo Name: Riverdale 05C

Facility Address:

34040 Union Camp Drive, Franklin, VA 23851 – note – facility address is approx. 7 miles from the actual discharge location. Lat Long of discharge location is 36 34 08 76 53 09.

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: Blackwater River	
Click here to enter text.	
Outfall #: 001	**Lat Lon: 36 34 08 76 53 09**
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Stream Name (2): Click here to enter text.	
Click here to enter text.	
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

Is there a design flow change? If yes give the change. Click here to enter text.

TMDL Review:

Is a TMDL IN PROGRESS for the receiving stream? No	
Has a TMDL been APPROVED that includes the receiving stream?	
No, *See note below in Additional Comments*	
If yes, Include TMDL Name, Pollutant(s) and date of approval:	
Click here to enter text.	
Is the facility assigned a WLA from the TMDL?	No
If Yes, what is the WLA?	
Click here to enter text.	

Review will be completed in 30 days of receipt of request.

Additional Comments:

A Natural Conditions assessment was completed to confirm the DO impairment is due to natural conditions and does not require the development of a TMDL. (Blackwater Dissolved Oxygen Assessment for Blackwater Swamp Waters: Approved 4/8/2010) The current Assessment Category is "4C – Not needing a TMDL". During the next Triennial Review, this section of the Blackwater River is proposed to be changed from a Class II to a Class VII swamp water.

ATTACHMENT 10

TABLE III(a) AND TABLE III(b) - CHANGE SHEETS

TABLE III(a)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001	TSS	No change	153 mg/l mo avg to 136 mg/l mo avg; 306 mg/l daily max to 272 mg/l daily max	Deletion of deink process caused recalculation of Fed Eff Guideline limits	
001	BOD	No change	79 mg/l mo avg to 66 mg/l moavg; 158 mg/l daily max to 132 mg/l daily max	Deletion of deink process caused recalculation of Fed Eff Guideline limits	
103	All	Not included/included in permit	Not included/included in permit	Internal outfall 103 included in the permit with this modification as the mill is repurposing and putting some internal bleach lines back into operation	
103	Kappa - Hardwood Annual Average	Included/Not included	Included/Not Included	Permittee has stated that hardwood will not be used at the mill, only softwood	

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
Special Conditions numbers 15-17 (Sampling Methodology for Outfall 103, Measurement and Reporting of Kappa Number for Outfall 103, Filtrate Recycling)	Added back into permit as a result of the repurposing of the mill. These conditions were removed from the permit at reissuance while the mill was not in an operational mode.	
Special Condition number 18 (New Discharge Characterization for Outfall 001)	Added to permit to require a discharge characterization of final effluent from outfall 001 as a result of the repurposing of the mill. The characterization will be due with the application for reissuance of the permit.	
Special Condition number 19 (Form 2F for Outfall 009)	Outfall 009 needs to be characterized as a result of spills from the landfill area to the storm water outfall. Characterization will indicate whether or not landfill leachate has impacted this outfall.	
Special Condition I.C. (Best Management Practices)	Added back into permit as a result of the repurposing of the mill. This condition was removed from the permit at reissuance while the mill was not in an operational mode.	
Special Condition number 6 (Quantification Levels Under Part I.A.)	The condition was updated to include QL's for the parameters in outfall 103.	

TABLE III(b)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 11

NPDES INDUSTRIAL PERMIT RATING WORKSHEET
AND
EPA PERMIT CHECKLIST

NPDES Permit Rating Work Sheet

___ Regular Addition
___ Discretionary Addition
___ Score change, but no status change
___ Deletion

NPDES NO: VA0004162

Facility Name: INTERNATIONAL PAPER FRANKLIN MILL

City: FRANKLIN VIRGINIA

Receiving Water: BLACKWATER RIVER

Reach Number:

Is this facility a steam electric power plant (SIC=4911) with one or more of the following characteristics?

1. Power output 500 MW or greater (not using a cooling pond/lake)
2. A nuclear power plant
3. Cooling water discharge greater than 25% of the receiving stream's 7Q10 flow rate

___ YES: score is 600 (stop here) ✓ NO (continue)

Is this permit for a municipal separate storm sewer serving a population greater than 100,000?

___ YES; score is 700 (stop here)
___ NO (continue)

FACTOR 1: Toxic Pollutant Potential

PCS SIC Code: 2621 Primary SIC Code: 2621

Other SIC Codes: 2611 2631 2679

Industrial Subcategory Code: ___ (Code 000 if no subcategory)

Determine the Toxicity potential from Appendix A. Be sure to use the TOTAL toxicity potential column and check one

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
___ No process waste streams	0	0	___ 3.	3	15	___ 7.	7	35
___ 1.	1	5	___ 4.	4	20	___ 8.	8	40
___ 2.	2	10	✓ 5.	5	25	___ 9.	9	45
			___ 6.	6	30	___ 10.	10	50

Code Number Checked: 05

Total Points Factor 1: 25 25

FACTOR 2: Flow/Stream Flow Volume *(Complete Either Section A or Section B; check only one)*

Section A--Wastewater Flow Only Considered

Wastewater Type (See Instructions)			Code	Points
Type I:	Flow < 5 MGD	___	11	0
	Flow 5 to 10 MGD	___	12	10
	Flow > 10 to 50 MGD	___	13	20
	Flow > 50 MGD	___	14	30
Type II:	Flow < 1 MGD	___	21	10
	Flow 1 to 5 MGD	___	22	20
	Flow > 5 to 10 MGD	___	23	30
	Flow > 10 MGD	___	24	50
Type III:	Flow < 1 MGD	___	31	0
	Flow 1 to 5 MGD	___	32	10
	Flow > 5 to 10 MGD	___	33	20
	Flow > 10 MGD	___	34	30

Section B--Wastewater and Stream Flow Considered

Wastewater Type (See Instructions)	Percent of Instream Wastewater Concentration at Receiving Stream Low Flow		Code	Points
Type I/III:	< 10%	___	41	0
	> 10% to < 50%	___	42	10
	> 50%	___	43	20
Type II:	<10%	___	51	0
	> 10% to < 50%	___	52	20
	>50%	✓	53	30

Code Checked from Section A or B: 53

Total Points Factor 2: 30 30

NPDES No.: VA0004162

FACTOR 3: Conventional Pollutants

(only when limited by the permit)

A. Oxygen Demanding Pollutant: (check one) ✓ BOD ___ COD ___ Other: _____

Permit Limits: (check one)		Code	Points
___	< 100 lbs/day	1	0
___	100 to 1000 lbs/day	2	5
___	>1000 to 3000 lbs/day	3	15
✓	>3000 lbs/day	4	20

Code Checked: 4

Points Scored: 20

B. Total Suspended Solids (TSS)

Permit Limits: (check one)		Code	Points
___	< 100 lbs/day	1	0
___	100 to 1000 lbs/day	2	5
___	>1000 to 5000 lbs/day	3	15
✓	>5000 lbs/day	4	20

Code Checked: 4

Points Scored: 20

C. Nitrogen Pollutant: (check one) ✓ Ammonia ___ Other: _____

Permit Limits: (check one)		Code	Points
___	< 300 lbs/day	1	0
___	300 to 1000 lbs/day	2	5
___	>1000 to 3000 lbs/day	3	15
✓	>3000 lbs/day	4	20

Code Checked: 4

Points Scored: 20

Total Points Factor 3: 60 60

FACTOR 4: Public Health Impact

Is there a public drinking water supply located within 50 miles downstream of the effluent discharge (this includes any body of water to which the receiving water is a tributary)? A public drinking water supply may include infiltration galleries, or other methods of conveyance that ultimately get water from the above referenced supply.

___ YES (if yes, check toxicity potential number below)

✓ NO (if no, go to Factor 5)

Determine the human health toxicity potential from Appendix A. Use the same SIC code and subcategory reference as in Factor 1. (Be sure to use the human health toxicity group column -- check one below)

Toxicity Group	Code	Points	Toxicity Group	Code	Points	Toxicity Group	Code	Points
___ No process waste streams	0	0	___ 3.	3	0	___ 7.	7	15
___ 1.	1	0	___ 4.	4	0	___ 8.	8	20
___ 2.	2	0	___ 5.	5	5	___ 9.	9	25
			___ 6.	6	10	___ 10.	10	30

Code Number Checked: ___

Total Points Factor 4: ___ 0

NPDES No.: | ✓ | A | 0 | 0 | 0 | 4 | 1 | 6 | 2 |

FACTOR 5: Water Quality Factors

A. *Is (or will) one or more of the effluent discharge limits based on water quality factors of the receiving stream (rather than technology-based federal effluent guidelines, or technology-based state effluent guidelines), or has a wasteload allocation been assigned to the discharge?*

	Code	Points
✓ Yes	1	10
___ No	2	0

B. *Is the receiving water in compliance with applicable water quality standards for pollutants that are water quality limited in the permit?*

	Code	Points
✓ Yes	1	0
___ No	2	5

C. *Does the effluent discharged from this facility exhibit the reasonable potential to violate water quality standards due to whole effluent toxicity?*

	Code	Points
___ Yes	1	10
✓ No	2	0

Code Number Checked: A | 1 | B | 1 | C | 2 |

Points Factor 5: A | 1 | 0 | + B | 0 | + C | 0 | 0 | = | 1 | 0 | TOTAL 10

FACTOR 6: Proximity to Near Coastal Waters

A. *Base Score: Enter flow code here (from Factor 2):* | ___ | ___ | *Enter the multiplication factor that corresponds to the flow code:* | ___ | ___ |

Check appropriate facility HPRI Code (from PCS):

HPRI #	*Code*	*HPRI Score*
___ 1	1	20
___ 2	2	0
✓ 3	3	30
___ 4	4	0
___ 5	5	20

Flow Code	Multiplication Factor
11, 31, or 41	0.00
12, 32, or 42	0.05
13, 33, or 43	0.10
14 or 34	0.15
21 or 51	0.10
22 or 52	0.30
23 or 53	0.60
24	1.00

HPRI code checked: | 3 |

Base Score: (HPRI Score) 30 x (Multiplication Factor) 0.6 = 5 (TOTAL POINTS)

B. *Additional Points--NEP Program*
For a facility that has an HPRI code of 3, does the facility discharge to one of the estuaries enrolled in the National Estuary Protection (NEP) program (see instructions) or the Chesapeake Bay?

	Code	Points
✓ Yes	1	10
___ No	2	0

C. *Additional Points--Great Lakes Area of Concern*
for a facility that has an HPRI code of 5, does the facility discharge any of the pollutants of concern into one of the Great Lakes' 31 areas of concern (see instructions)

	Code	Points
___ Yes	1	10
✓ No	2	0

Code Number Checked: A | 3 | B | 1 | C | 2 |

Points Factor 6: A | 0 | 5 | + B | 1 | 0 | + C | 0 | 0 | = | 15 | TOTAL

NPDES Permit Rating Work Sheet

NPDES NO: VA0004162

SCORE SUMMARY

Factor	Description	Total Points
1	Toxic Pollutant Potential	25
2	Flow/Stream flow Volume	30
3	Conventional Pollutants	60
4	Public Health Impacts	—
5	Water Quality Factors	10
6	Proximity to Near Coastal Waters	15
	TOTAL (Factors 1-6)	140

S1. Is the total score equal to or greater than 80? ✓ Yes (Facility is a major) ___ No

S2. If the answer to the above question is no, would you like this facility to be discretionary major?

___ No

___ Yes (add 500 points to the above score and provide reason below:

Reason:

NEW SCORE: 140

OLD SCORE: 140

Mark Sauer

Permit Reviewer's Name

(757) 518-2105

Phone Number

8/23/10

Date

State "Transmittal Checklist" to Assist in Targeting Municipal and Industrial Individual NPDES Draft Permits for Review

Part I. State Draft Permit Submission Checklist

In accordance with the MOA established between the Commonwealth of Virginia and the United States Environmental Protection Agency, Region III, the Commonwealth submits the following draft National Pollutant Discharge Elimination System (NPDES) permit for Agency review and concurrence.

Facility Name: International Paper – Franklin Mill

NPDES Permit Number: VA0004162

Permit Writer Name: Mark Sauer

Date: 2/21/12

Major [X] **Minor** [ ] **Industrial** [X] **Municipal** [ ]

I.A. Draft Permit Package Submittal Includes:	**Yes**	**No**	**N/A**
1. Permit Application?	X		
2. Complete Draft Permit (for renewal or first time permit – entire permit, including boilerplate information)?	X		
3. Copy of Public Notice?		X	
4. Complete Fact Sheet?	X		
5. A Priority Pollutant Screening to determine parameters of concern?	X		
6. A Reasonable Potential analysis showing calculated WQBELs?	X		
7. Dissolved Oxygen calculations?		X	
8. Whole Effluent Toxicity Test summary and analysis?	X		
9. Permit Rating Sheet for new or modified industrial facilities?	X		

I.B. Permit/Facility Characteristics	**Yes**	**No**	**N/A**
1. Is this a new, or currently unpermitted facility?		X	
2. Are all permissible outfalls (including combined sewer overflow points, non-process water and storm water) from the facility properly identified and authorized in the permit?	X		
3. Does the fact sheet **or** permit contain a description of the wastewater treatment process?	X		
I.B. Permit/Facility Characteristics – cont.	**Yes**	**No**	**N/A**
4. Does the review of PCS/DMR data for at least the last 3 years indicate significant non-compliance with the existing permit?		X	
5. Has there been any change in streamflow characteristics since the last permit was developed?		X	

6. Does the permit allow the discharge of new or increased loadings of any pollutants?		X	
7. Does the fact sheet **or** permit provide a description of the receiving water body(s) to which the facility discharges, including information on low/critical flow conditions and designated/existing uses?	X		
8. Does the facility discharge to a 303(d) listed water?	X		
a. Has a TMDL been developed and approved by EPA for the impaired water?		X	
b. Does the record indicate that the TMDL development is on the State priority list and will most likely be developed within the life of the permit?	X		
c. Does the facility discharge a pollutant of concern identified in the TMDL or 303(d) listed water?		X	
9. Have any limits been removed, or are any limits less stringent, than those in the current permit?		X	
10. Does the permit authorize discharges of storm water?	X		
11. Has the facility substantially enlarged or altered its operation or substantially increased its flow or production?		X	
12. Are there any production-based, technology-based effluent limits in the permit?	X		
13. Do any water quality-based effluent limit calculations differ from the State's standard policies or procedures?		X	
14. Are any WQBELs based on an interpretation of narrative criteria?		X	
15. Does the permit incorporate any variances or other exceptions to the State's standards or regulations?		X	
16. Does the permit contain a compliance schedule for any limit or condition?		X	
17. Is there a potential impact to endangered/threatened species or their habitat by the facility's discharge(s)?		X	
18. Have impacts from the discharge(s) at downstream potable water supplies been evaluated?			X
19. Is there any indication that there is significant public interest in the permit action proposed for this facility?	X		
20. Have previous permit, application, and fact sheet been examined?	X		

Part II. NPDES Draft Permit Checklist

Region III NPDES Permit Quality Review Checklist – For Non-Municipals

(To be completed and included in the record for all non-POTWs)

II.A. Permit Cover Page/Administration	Yes	No	N/A
1. Does the fact sheet **or** permit describe the physical location of the facility, including latitude and longitude (not necessarily on permit cover page)?	X		
2. Does the permit contain specific authorization-to-discharge information (from where to where, by whom)?	X		

II.B. Effluent Limits – General Elements	Yes	No	N/A
1. Does the fact sheet describe the basis of final limits in the permit (e.g., that a comparison of technology and water quality-based limits was performed, and the most stringent limit selected)?	X		
2. Does the fact sheet discuss whether "antibacksliding" provisions were met for any limits that are less stringent than those in the previous NPDES permit?			X

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ)	Yes	No	N/A
1. Is the facility subject to a national effluent limitations guideline (ELG)?	X		
a. If yes, does the record adequately document the categorization process, including an evaluation of whether the facility is a new source or an existing source?	X		
b. If no, does the record indicate that a technology-based analysis based on Best Professional Judgement (BPJ) was used for all pollutants of concern discharged at treatable concentrations?			X
2. For all limits developed based on BPJ, does the record indicate that the limits are consistent with the criteria established at 40 CFR 125.3(d)?	X		
3. Does the fact sheet adequately document the calculations used to develop both ELG and /or BPJ technology-based effluent limits?	X		
4. For all limits that are based on production or flow, does the record indicate that the calculations are based on a "reasonable measure of ACTUAL production" for the facility (not design)?	X		
5. Does the permit contain "tiered" limits that reflect projected increases in production or flow?		X	
a. If yes, does the permit require the facility to notify the permitting authority when alternate levels of production or flow are attained?			X
6. Are technology-based permit limits expressed in appropriate units of measure (e.g., concentration, mass, SU)?	X		

II.C. Technology-Based Effluent Limits (Effluent Guidelines & BPJ) – cont.	Yes	No	N/A
7. Are all technology-based limits expressed in terms of both maximum daily, weekly average, and/or monthly average limits?	X		
8. Are any final limits less stringent than required by applicable effluent limitations guidelines or BPJ?		X	

II.D. Water Quality-Based Effluent Limits	Yes	No	N/A
1. Does the permit include appropriate limitations consistent with 40 CFR 122.44(d) covering State narrative and numeric criteria for water quality?	X		
2. Does the record indicate that any WQBELs were derived from a completed and EPA approved TMDL?		X	
3. Does the fact sheet provide effluent characteristics for each outfall?	X		
4. Does the fact sheet document that a "reasonable potential" evaluation was performed?	X		
a. If yes, does the fact sheet indicate that the "reasonable potential" evaluation was performed in accordance with the State's approved procedures?	X		
b. Does the fact sheet describe the basis for allowing or disallowing in-stream dilution or a mixing zone?	X		
c. Does the fact sheet present WLA calculation procedures for all pollutants that were found to have "reasonable potential"?	X		
d. Does the fact sheet indicate that the "reasonable potential" and WLA calculations accounted for contributions from upstream sources (i.e., do calculations include ambient/background concentrations where data are available)?			X
e. Does the permit contain numeric effluent limits for all pollutants for which "reasonable potential" was determined?	X		
5. Are all final WQBELs in the permit consistent with the justification and/or documentation provided in the fact sheet?	X		
6. For all final WQBELs, are BOTH long-term (e.g., average monthly) AND short-term (e.g., maximum daily, weekly average, instantaneous) effluent limits established?	X		
7. Are WQBELs expressed in the permit using appropriate units of measure (e.g., mass, concentration)?	X		
8. Does the fact sheet indicate that an "antidegradation" review was performed in accordance with the State's approved antidegradation policy?	X		

II.E. Monitoring and Reporting Requirements	Yes	No	N/A
1. Does the permit require at least annual monitoring for all limited parameters?	X		
a. If no, does the fact sheet indicate that the facility applied for and was granted a monitoring waiver, AND, does the permit specifically incorporate this waiver?			
2. Does the permit identify the physical location where monitoring is to be performed for each outfall?	X		
3. Does the permit require testing for Whole Effluent Toxicity in accordance with the State's standard practices?	X		

II.F. Special Conditions	Yes	No	N/A
1. Does the permit require development and implementation of a Best Management Practices (BMP) plan or site-specific BMPs?	X		
a. If yes, does the permit adequately incorporate and require compliance with the BMPs?	X		
2. If the permit contains compliance schedule(s), are they consistent with statutory and regulatory deadlines and requirements?			X
3. Are other special conditions (e.g., ambient sampling, mixing studies, TIE/TRE, BMPs, special studies) consistent with CWA and NPDES regulations?	X		

II.G. Standard Conditions	Yes	No	N/A
1. Does the **permit** contain all 40 CFR 122.41 standard conditions or the State equivalent (or more stringent) conditions?	X		

List of Standard Conditions – 40 CFR 122.41

Duty to comply	Property rights	Reporting Requirements
Duty to reapply	Duty to provide information	Planned change
Need to halt or reduce activity not a defense	Inspections and entry	Anticipated noncompliance
Duty to mitigate	Monitoring and records	Transfers
Proper O & M	Signatory requirement	Monitoring reports
Permit actions	Bypass	Compliance schedules
	Upset	24-Hour reporting
		Other non-compliance

2. Does the permit contain the additional standard condition (or the State equivalent or more stringent conditions) for existing non-municipal dischargers regarding pollutant notification levels [40 CFR 122.42(a)]?	X		

Part III. Signature Page

Based on a review of the data and other information submitted by the permit applicant, and the draft permit and other administrative records generated by the Department/Division and/or made available to the Department/Division, the information provided on this checklist is accurate and complete, to the best of my knowledge.

Name	Mark Sauer
Title	Water Permit Manager
Signature	
Date	2/21/12

ATTACHMENT 12

CHRONOLOGY SHEET

ATTACHMENT 13

Public Participation/

Pertinent Correspondence

INTERNATIONAL PAPER

34040 Union Camp Drive
Franklin, VA 23851

December 19, 2011

UPS Tracking # - 1Z 292 393 42 5328 5390

Mr. Mark Sauer
Virginia Department of Environmental Quality
5636 Southern Boulevard
Virginia Beach, VA 23462

Re: VPDES Permit No. VA0004162 – International Paper, Franklin Mill
Permit Modification Request

Dear Mr. Sauer:

International Paper (IP) requests a VPDES permit modification to address the restart of the Franklin Mill fluff pulp operation. The following items will need to be added or changed in our existing permit to meet the new operations. Any section not addressed by this modification request will remain as previously submitted in the May 19, 2010 permit renewal application.

- **Form 1**
  - **Section VII SIC Codes** – International Paper plans to operate as a pulp mill (2611)
  - **Section XII Nature of Business** – Manufacturer of bleached fluff pulp
  - **Section XIII Certification Name and Official Title** - Allison Magness, Mil Manager

- **Form 2C**
  - **Add - Section I Outfall Location**
    - **A. Outfall Number** – 103
    - **B. Latitude** – N36 40 49
    - **C. Longitude** – W76 54 46
    - **D. Receiving Water** – Internal outfall F Bleach Line
  - **Section II Flows, Sources of Pollution and Treatment Technologies**
    - **A.** See attached
    - **B.** See attached

VIRGINIA ENVIRONMENTAL EXCELLENCE PROGRAM

- **Section III Production**
  - **C. 1. Average Daily Production**
    - **a. Quantity per day** - 844
    - **b. Units of measure** – Gross off the machine production in air dried tons
    - **c. Operation, Production, Material, ETC.** – Pulp
  - **C. 2. Affected Outfalls** - 001

  - **C. 1. Average Daily Production**
    - **a. Quantity per day** - 925
    - **b. Units of measure** – Air dried tons unbleached brown stock
  - **c. Operation, Production, Material, ETC.** – Unbleached pulp production entering first stage of bleach plant
  - **C. 2. Affected Outfalls** – 103

- **Section V Intake and Effluent Characteristics**
  - Reported in Section V. D

- **Section VI Potential Discharges Not Covered by Analysis**
  - No data available, mill not operating

- **Section IX Certification**
  - **A. Name and Official Title** – Allison Magness Mill Manager
  - **B. Phone No.** – 757-569-4848

- **Form 2F**
  - **Section IV Narrative Description of Pollution Sources**
    - **A.** See attached
    - **B.** See attached
    - **C.** See attached

  - **Section VI Significant Leaks or Spills**
    - Outfall 009 – On September 30,2010 the landfill berm was breached as a result of a rain event greater than a 24 hour 25 year storm event caused by Tropical Storm Nicole. As a result of the breach an undetermined volume of leachate was released into the drainage area of Outfall 009.
    - Outfall 009 – On August 27,2011the landfill berm was breached as a result of a rain event greater than a 24 hour 25 year storm event caused by Hurricane Irene. As a result of the breach an undetermined volume of leachate was released into the drainage area of Outfall 009.

We look forward to working with you to make these modifications. Please contact Raye Moore at (757) 569-4793, if you have any questions regarding this request.

Sincerely,

Sheryl S. Raulston
EHS Manager

VIRGINIA
ENVIRONMENTAL EXCELLENCE
PROGRAM

Sauer, Mark (DEQ)

From: Raye Moore [Raye.Moore@ipaper.com]
Sent: Tuesday, January 24, 2012 2:06 PM
To: Sauer, Mark (DEQ)
Subject: RE: 40 CFR subpart applicability

Mark,

We will not have Secondary Fiber Deink in the IP project. If we repurpose we may have deinking, but under current scope of project deinking is not included.

Raye

From: Sauer, Mark (DEQ) [mailto:Mark.Sauer@deq.virginia.gov]
Sent: Tuesday, January 24, 2012 1:23 PM
To: Raye Moore
Subject: 40 CFR subpart applicability

Raye –

I'm working on the modification for your VPDES permit, and in the past we applied Subpart B, Bleached Papergrade Kraft and Soda and we also applied Subpart I Secondary Fiber Deink; would any other subparts apply to the new product or process, and would Subpart I apply to the new product or process?

I want to make sure we get the calculations correct up front so we don't waste time having to do them again later on – we don't have much (or any) time to waste in trying to get this permit out as quick as possible.

Thanks, I appreciate it.

Mark Sauer
DEQ-TRO Water Permits Section
757-518-2105
mark.sauer@deq.virginia.gov

COMMONWEALTH of VIRGINIA

Karen Remley, MD, MBA, FAAP
State Health Commissioner

J.Wesley Kleene, PhD, PE
Director, Office of Drinking Water

DEPARTMENT OF HEALTH
OFFICE OF DRINKING WATER
Southeast Virginia Field Office

830 Southampton Avenue
Suite 2058
Norfolk, VA 23510
Phone (757) 683-2000
Fax (757) 683-2007

MEMORANDUM

TO: Mr. Mark H. Sauer **DATE:** FEB 13 2012
Environmental Engineer Senior
Department of Environmental Quality - Tidewater Regional Office

FROM: Daniel B. Horne, PE
Engineering Field Director DBH

CITY/COUNTY: ISLE OF WIGHT COUNTY

PROJECT TYPE: ☐ New ☑ Renewal or Revision

☑ VPDES ☐ VPA ☐ VWPP ☐ JPA ☐ Other_____

☑ Number: VA0004162

OWNER/APPLICANT: International Paper Company / Ms. Sheryl S. Raulston, EHS Manager

PROJECT: International Paper – Franklin Mill VPDES Permit Modification

☑ There are no public water supply raw water intakes located within 15 miles downstream or within one tidal cycle upstream of the discharge.

☐ The raw water intake for the _____ waterworks is located _____ miles [downstream/upstream] of the discharge. This should be a sufficient distance to minimize the impacts of the discharge. We recommend a minimum Reliability Class of ____ for this facility.

☐ The raw water intake for the _____ waterworks is located _____ miles [downstream/upstream (within one tidal cycle)] of the discharge.

☐ Please forward a copy of the Draft Permit for our review and comment.

☐ Comments: _____

_____

Prepared by: Ernest G. Johnson, Jr., PE
District Engineer

pc: V.D.H. - Office of Drinking Water, Field Services Engineer

R:\DIST20A\Isle of Wight\International Paper\VPDES AL feb12.doc

INTERNATIONAL PAPER

P. O. Box 178
Franklin, VA 23851-0178

August 31, 2011

UPS Tracking #: 1Z 292 39342 5468 0719

Department of Environmental Quality
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach, VA 23462

Attention: Pollution Response Coordinator

Subject: Required 5-Day Letter for Hurricane Irene Environmental Incidents - VPDES Permit No. VA0004162

To Whom It May Concern:

This letter is being submitted to satisfy the requirements of the International Paper VPDES Permit No. VA0004162. Hurricane Irene caused 12.84 inches of rain to fall on the Franklin millsite on August 27th and August 28th, 2011. We had wind gusts up to 59 MPH and rainfall totaling 12.76 inches in a 24 hour period (the 25 year storm event rainfall is 6.5 inches of rain in a 24 hour period). Our environmental systems are designed to contain a 25 year storm event. Many of the systems were overloaded due to the excessive rainfall, and the pumping capacities of the systems were exceeded. Due to adverse weather conditions, start and stop times of discharges are based on best estimates available. The following is a description of what was reported by phone to Mark Sauer of DEQ on August 27th and 29th, 2011. There were four overflows/discharges from environmental systems due to Hurricane Irene. These were all reported under one IR number.

A. Incident Report (IR) Number: 2012-T-0526

INCIDENT #1: Landfill Leachate Collection Pond Dike Breech

1. **Description of nature and location of discharge:** Landfill leachate overflow from collection pond at active landfill (Permit #504). The leachate ran overground, eventually draining to Lee's Mill Pond.

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2. **Cause of discharge**: Rainfall event exceeded design capacity of system for 25 year storm event. Collection pond dike was breeched approximately 12 inches from top of dike.
3. **Date of discharge**: August 27, 2011 at 2:40 PM
4. **Length of time of discharge**: Estimated to last until 5:00 AM August 28, 2011
5. **Volume of discharge**: unknown
6. **Steps planned or taken to reduce, eliminate or prevent recurrence**: Immediately after rain event was over, contractors made temporary repairs to dike. Permanent repairs will be made shortly. Leachate pumps brought collection pond levels down to normal. Rainfall exceeded design capacity for 25 year storm event.

INCIDENT #2: Highground Stormwater Retention Pond Overflow

1. **Description of nature and location of discharge**: Stormwater overflow from Highground (closed landfill) stormwater retention pond to Washole Creek. This stormwater is normally collected and pumped to our effluent treatment system.
2. **Cause of discharge**: Rainfall event exceeded design capacity of system for 25 year storm event. Rate of rainfall from this event exceeded the backup diesel pump capabilities.
3. **Date of discharge**: August 27, 2011 at 3:00 PM
4. **Length of time of discharge**: Estimated to last until 1:00 PM on August 28, 2011
5. **Volume of discharge**: unknown
6. **Steps planned or taken to reduce, eliminate or prevent recurrence**: Prior to storm event, stormwater retention pond levels were pumped down as low as possible. The primary pump lost power due to failure of electrical circuit during storm, and the backup diesel pump could not keep up with flows. After the storm was over, the electrical power was restored to the primary pump and along with the diesel pump, the pond level was lowered. Rainfall exceeded design capacity for 25 year storm event.

INCIDENT #3: South River Sewer Overflow

1. **Description of nature and location of discharge**: Stormwater that fell on the Power/Recovery area of the mill discharged through a point source in our flood wall dike when the stormwater level reached a 25 year storm event. This stormwater flowed to the Blackwater River. Our systems are designed for 25 year storm events.
2. **Cause of discharge**: Rainfall event exceeded design capacity of system for 25 year storm event.
3. **Date of discharge**: August 27, 2011 at 6:00 PM
4. **Length of time of discharge**: Estimated to last until 11:30 PM August 27, 2011
5. **Volume of discharge**: unknown

6. **Steps planned or taken to reduce, eliminate or prevent recurrence**: Flood wall was installed to protect the mill against rising Blackwater River levels after the flood produced by Hurricane Floyd inundated Franklin and the mill in 1999. Normal rainfall amounts up to a 25 year storm event are sent through our effluent treatment system. At rainfalls exceeding our design capacity of a 25 year storm event, the stormwater that falls in this Power/Recovery area is discharged by design through an opening in the flood wall.

INCIDENT #4: Sawmill Stormwater Release

1. **Description of nature and location of discharge**: The pipeline that carries effluent/stormwater from Sawmill over the railroad tracks and places it in the mill's effluent treatment system broke off its supports during the high winds of Hurricane Irene. The pipeline broke, releasing the stormwater to the railroad tracks below, which are located between the Sawmill and the Mill site. This stormwater drained to the Blackwater River.
2. **Cause of discharge**: Pipe line conveying effluent/stormwater was damaged due to high winds.
3. **Date of discharge**: August 27, 2011 at 7:00 PM
4. **Length of time of discharge**: Estimated to last until 4:00 PM August 28, 2011
5. **Volume of discharge**: unknown
7. **Steps planned or taken to reduce, eliminate or prevent recurrence**: The pipeline was repaired following the storm event. Additional supports to pipe will be installed.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions regarding these incidents, you may call me at (757) 569- 4558.

Sincerely,

Sheryl S. Raulston
EHS Manager

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